

**MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES
LOCAL PUBLIC HEALTH AGENCY INFRASTRUCTURE
CAPACITY ASSESSMENT REPORT
NOVEMBER 2004**

Facts contained in this report were obtained from a survey questionnaire completed in July 2004 by 114 local public health agencies in Missouri. The purpose of the survey is to gather information about public health system capabilities, identify variation among agencies, and to provide agencies a means to compare themselves with peer agencies. This report reflects capacity of administration, facility, workforce, services and programs offered, activities related to West Nile Virus prevention and control, and activities related to communicable disease reporting in communities.

The information in this report is presented as a collection of all responses, and for comparison, is sorted by various sizes of population served. Some data is compared to results of the same survey completed in the previous year.

The Center for Local Public Health Services in the Missouri Department of Health and Senior Services prepared this report. For further information call 573-751-6170.

[Table of Contents](#)

TABLE OF CONTENTS

CHAPTER 1 - ORGANIZATIONAL CAPACITY

- I. [Summary of Statewide Findings Related to Local Public Health Agency Organizational Capacity - 2004](#)
- II. [Variation In Organizational Capacity by Size of Population Served - 2004](#)
- III. [Graph Comparisons of Organizational Capacity](#)
- IV. [Data Tables Related to Organizational Capacity](#)

CHAPTER 2 - WORKFORCE

- I. [Summary of Findings Related to Local Public Health Agency Workforce - 2004](#)
- II. [Variation in Local Public Health Agency Workforce by Size of Population Served - 2004](#)
- III. [Graph Comparisons of Workforce](#)
- IV. [Data Tables Related to Workforce](#)

CHAPTER 3 - SERVICES AND PROGRAMS

- I. [Summary of Services and Programs - 2004](#)
- II. [Variation in Services and Programs by Size of Population Served - 2004](#)
- III. [Graph Comparisons of Services and Programs](#)
- IV. [Data Tables Related to Services and Programs](#)

CHAPTER 4 - ACTIVITIES RELATED TO WEST NILE VIRUS PREVENTION AND CONTROL

- I. [Summary of West Nile Virus Prevention Activities - 2004](#)
- II. [Variation in Activities to Prevent West Nile Virus by Size of Population Served - 2004](#)
- III. [Graph Comparisons of West Nile Virus Prevention Activities](#)
- IV. [Data Tables Related to West Nile Virus Prevention Activities](#)

CHAPTER 5 – MISCELLANEOUS ACTIVITIES RELATED TO COMMUNICABLE DISEASE REPORTING

- I. [Summary of Communicable Disease Reporting - 2004](#)
- II. [Graph Comparisons of Communicable Disease Reporting](#)

III. [Data Tables Related to Communicable Disease Reporting](#)

CHAPTER 1

I. SUMMARY OF STATEWIDE FINDINGS RELATED TO LOCAL PUBLIC HEALTH AGENCY ORGANIZATIONAL CAPACITY - 2004

Progress is noted from 2003 to 2004 in a number of dimensions of capacity to provide essential public health services. All agencies now have a system to assure that staff can be contacted at all times if emergencies occur or communicable diseases need to be reported. Agencies are more likely to use the MOHSIS system to report and track infectious diseases, making it easier for public health authorities everywhere to be aware of disease outbreaks. Agencies are reporting increased use of technology such as Geographic Information Systems (GIS). An increasing number of agencies have their own web site to share information with the public, and a number of agencies have developed alternative capacity to communicate during disaster situations.

Availability: 16% of local public health agencies in Missouri reported they are open for business at their main facility less than 40 hours a week during 2004. Most agencies (64%) serve the public between 40 and 44 hours each week, and 20% are open 45 hours or more each week. (See Graph 1.1 and Data Table 1.1)

Satellite Locations: 23% of agencies report having branch locations, down from 27% in 2003. Of the 26 agencies with branch offices, most (77%) have only 1 site. The remaining agencies have from 2 to 10 separate branch locations. Twenty-seven percent (27%) of branch offices are open to provide services only 1 to 5 hours per week while 65% are open 16 or more hours each week. (See Graphs 1.2.1 & 1.2.2 and Data Tables 1.2, 1.2.1 & 1.2.2)

Emergency Contact: 100% of agencies have a system to receive notification and respond to emergencies at all times of the day or night. Cell phones are relied upon by 94% of agencies for after-hours communication, and 75% of agencies provide cell phones for their key staff. Fifty-five percent (55%) of agencies use pagers. Agency staff is contacted after hours by 911 centers, a local law enforcement agency or by an answering service. (See Graphs 1.3.1 & 1.3.2.1 and Data Tables 1.3.1 & 1.3.2.1)

Public Health Business Off Site: over half (53%) of agencies report that from 25% to 49% of their business is conducted outside of their facility. Twenty-six percent (26%) of agencies report that 50% or more of public health business is conducted off site. (See Graph 1.4 and Data Table 1.4)

Billing for Services: 98% of agencies bill Medicaid for services, 82% bill Medicare, and 31% bill private insurance companies (up from 28% in June 2003). A majority of agencies (76%) charge their clients for some services. Fifty-four local public health agencies (47%) also receive payment for services they provide to other agencies. (See Graph 2.1 and Data Table 2.1)

Technology: fewer agencies (68%) report being connected through MOHSAIC for WIC than in 2003 when 91% reported using MOHSAIC for WIC. Other MOHSAIC applications used by local public health agencies include Vital Records (96%), and Immunizations (99%).

Ninety-three percent (93%) of agencies reported using MOHSIS for Communicable Disease Reporting and Investigation (up from 80% in 2003). The percentage of local agencies with a web site increased from 41% in 2003 to nearly half (49%) in 2004. Thirty-eight agencies report having an Internet Service Provider other than the DHSS network. Twenty (20) agencies (18%) reportedly use GIS technology for public health purposes like tracking sewage systems, water well locations, lead testing results, communicable diseases, or other applications. (See Graphs 3.1.1 thru 3.1.7.6, and 3.3 thru 3.9 and Data Tables 3.1.1 thru 3.1.7.6 & 3.3 thru 3.9)

Communications Technology: Twenty-five percent (25%) of agencies reportedly have UHF radio capabilities and 46% report having VHF capabilities. Only 6% of agencies have HF-2-way radio capabilities. Nineteen local public health agencies (17%) have agreements with local amateur radio groups, and 2 agencies have satellite phones for emergency communication. (See Graph 3.3 thru 3.9 and Data Tables 3.5 thru 3.9)

Quality Improvement: 82% of agencies report having designated staff for planning and implementing quality improvement methods across public health programs. However, only 23% of agencies rate their capacity to utilize quality improvement principles throughout their organization as “very good”. Forty-six percent (46%) of agencies report they are doing “okay” in implementing quality improvement methods. Eighty-one percent (81%) report that quality improvement and customer service characteristics are incorporated into staff performance expectations (down from 87% in 2003). (See Graphs 4.1 thru 4.3 and Data Tables 4.1 thru 4.3)

Strategic Planning: 89% of agencies report having a strategic plan. Of the 102 agencies that have a plan, 48% report that it was updated in 2003 or 2004. Forty-five percent (45%) have not updated their plan for 3 years or more. (See Graphs 6.1 and 6.1.1 and Data Tables 6.1 and 6.1.1)

Sixty-four percent (64%) of agencies report referring to their strategic plan from one to four times during the year; however, 21% do not ever refer to it. All agencies with a strategic plan involved their staff in its development or revision, 87% involved their governing body, and 57% involved members of their community. Strategic plans are used by 68% of agencies for performance management, 67% use it for budget allocation, and 51% use the plan for marketing. (See Graphs 6.1.2 thru 6.1.4 and Data Tables 6.1.2 thru 6.1.4)

CHAPTER 1

II. VARIATION IN ORGANIZATIONAL CAPACITY BY SIZE OF POPULATION SERVED - 2004

Availability: 16% of agencies serving populations of 20,000 or fewer, and 21% of agencies that serve populations from 20,001 to 40,000 are open less than 40 hours each week. No agencies that serve populations greater than 80,000 are open less than 40 hours each week, in fact a majority of the largest agencies (54%) are open from 45 to 50 hours each week. (See Graph 1.1 and Data Table 1.1)

Satellite Locations: agencies serving populations of 20,000 or fewer are least likely to operate satellite facilities; 13% have satellite locations and each has only 1 site. Agencies that serve populations greater than 80,000 are most likely to maintain satellite locations; 46% of them do so. Half (50%) of the largest agencies with satellite locations have only 1 site, but 33% maintain from 6 to 10 different locations. (See Graph 1.2.1 and Data Tables 1.2 and 1.2.1)

Emergency Contact: all agencies serving populations greater than 80,000 have an answering service and rely upon pagers for emergency contact of staff. Only 41% of agencies serving populations from 20,001 to 40,000 use pagers for this purpose. Cell phones are the most common means of after-hours contact regardless of agency size, and the percentage of agencies using them ranges from 91% of agencies serving populations of 20,000 or fewer to 100% of agencies serving populations over 80,000. Ninety-two percent (92%) of the largest agencies provide cell phones for their key staff compared to 64% of the smallest agencies. (See Graphs 1.3.1 and 1.3.2.1 and Data Tables 1.3.1 and 1.3.2.1)

Public Health Business Off Site: the percentage of time that agency staff spends in the community, or otherwise working outside of agency offices varies by size of population served. Those that serve populations fewer than 20,000 are most likely to work within their offices; 30% of them spend less than 25% of the time conducting business off site. All sizes of agencies are more likely to spend from 25% to 49% of their staff's time working out in communities, however, 77% of the largest agencies do so compared to 41% of the smallest agencies. (See Graph 1.4 and Data Table 1.4)

Billing for Services: agencies serving populations greater than 80,000 are less likely than other agencies to bill a third party for services they provide. Ninety-two percent (92%) of them bill Medicaid compared to 100% of agencies serving populations fewer than 20,000 and those serving populations from 40,001 to 80,000. Forty-six percent (46%) of the largest agencies bill Medicare, compared to 93% of agencies serving populations of 20,000 or fewer, and only 15% bill private insurance compared to 36% of agencies serving populations fewer than 20,000. All agencies serving populations from 40,001 to 80,000 charge their clients for services. About seventy percent (70%) of agencies serving populations of 20,000 or fewer and agencies serving populations between 20,001 and 40,000 do so. Ninety-two percent (92%) of agencies serving populations over 80,000 charge clients for services. (See Graph 2.1 and Data Table 2.1)

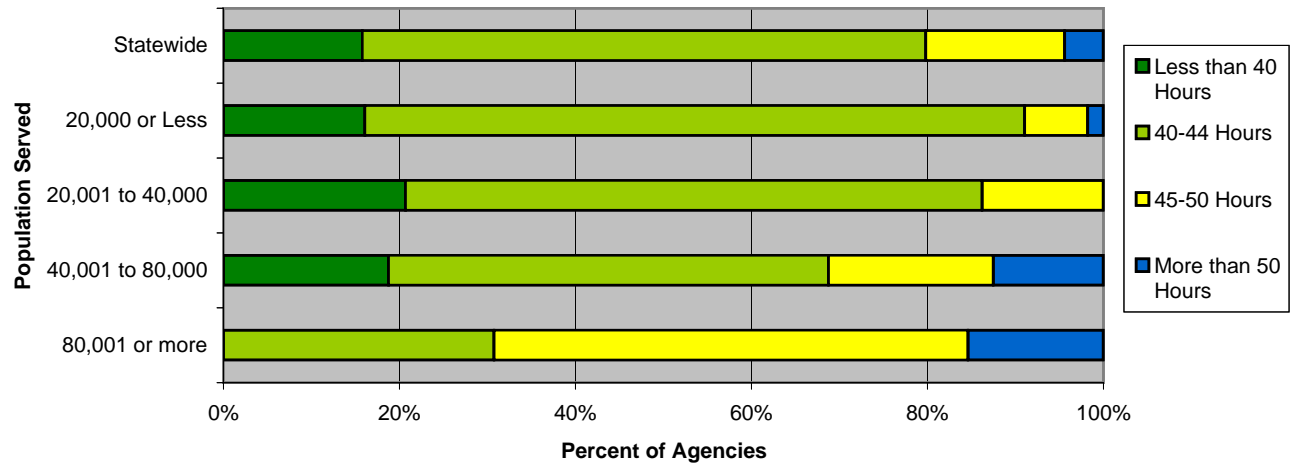
Technology: (92%) of agencies that serve populations greater than 80,000 have a web site compared to only 32% of those serving populations fewer than 20,000. The percentage of agencies with a web site in the 2 groups serving other population sizes ranges from 55% to 63%. The largest agencies are also most likely to use Geographic Information Systems (GIS); 85% of them are using this technology. Thirty-eight percent (38%) of agencies serving populations between 40,001 and 80,000 use GIS, but only 3% to 4% of agencies in groups serving smaller population sizes do so. (See Graph 3.1.1 thru 3.1.7 and Data Tables 3.1.4 and 3.1.6)

Quality Improvement: 92% of agencies serving populations between over 80,000 have staff designated to lead quality improvement efforts compared to 79% of agencies serving populations fewer than 20,000. Thirty-eight percent (38%) of agencies serving populations greater than 80,000 rate their capacity to utilize quality improvement principles and methods as “very good” compared to only 16% of agencies serving populations fewer than 20,000 and 19% of agencies serving populations from 40,001 to 80,000. (See Graphs 4.1 and 4.2 and Data Tables 4.1 and 4.2)

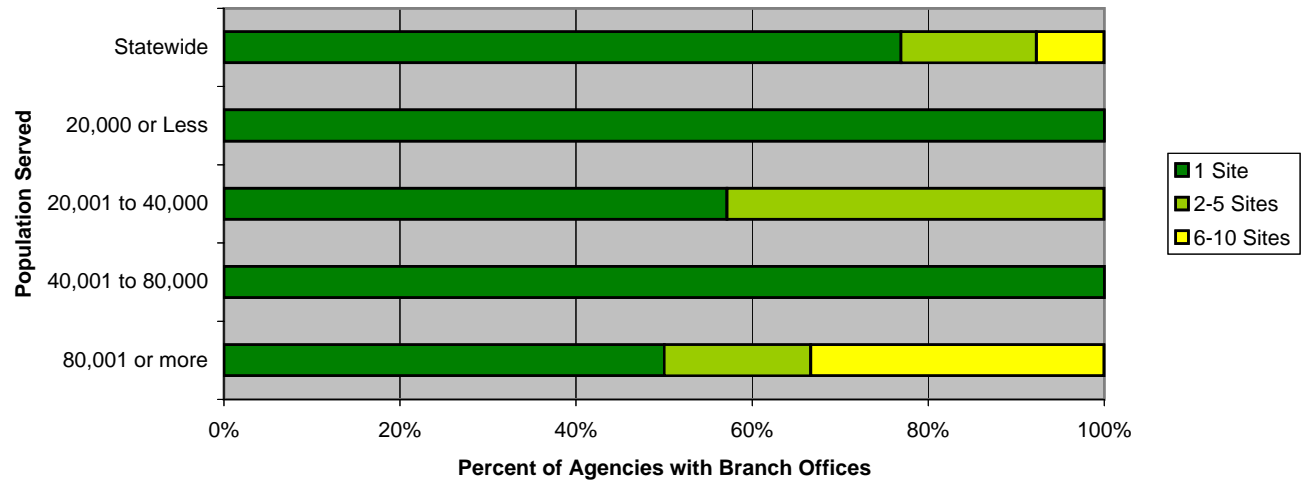
Strategic Planning: agencies serving all population sizes are roughly equal in the likelihood of having a strategic plan; 88% to 92% within each group do so. However, only 48% of agencies serving populations of 20,000 or fewer have updated their plan in the last three years while 67% of those serving populations over 80,000 have done so. Twenty-eight percent (28%) of agencies serving populations of 20,000 or fewer, and 29% of agencies serving populations from 40,001 to 80,000 that have a strategic plan, did not refer to or use their plan in the past year. Thirty-three percent (33%) of the largest agencies with a plan referred to it 10 or more times during the last year. (See Graphs 6.1 thru 6.1.2 and Data Tables 6.1 thru 6.1.2)

Agencies serving populations fewer than 20,000 are more likely to involve their governing body in developing or revising their strategic plan; 92% involved their governing body compared to only 75% of agencies serving populations over 80,000. Agencies serving populations from 20,001 to 40,000 are more likely to involve community members in strategic planning with 62% of them doing so, compared to 50% of agencies serving populations from 40,001 to 80,000. Ninety-two percent (92%) of the largest agencies refer to their plan for budgeting and resource allocation, while only 57% of agencies serving populations from 40,001 to 80,000 use their plan for this purpose. (See Graphs 6.1.3 and 6.1.4 and Data Tables 6.1.3 and 6.1.4)

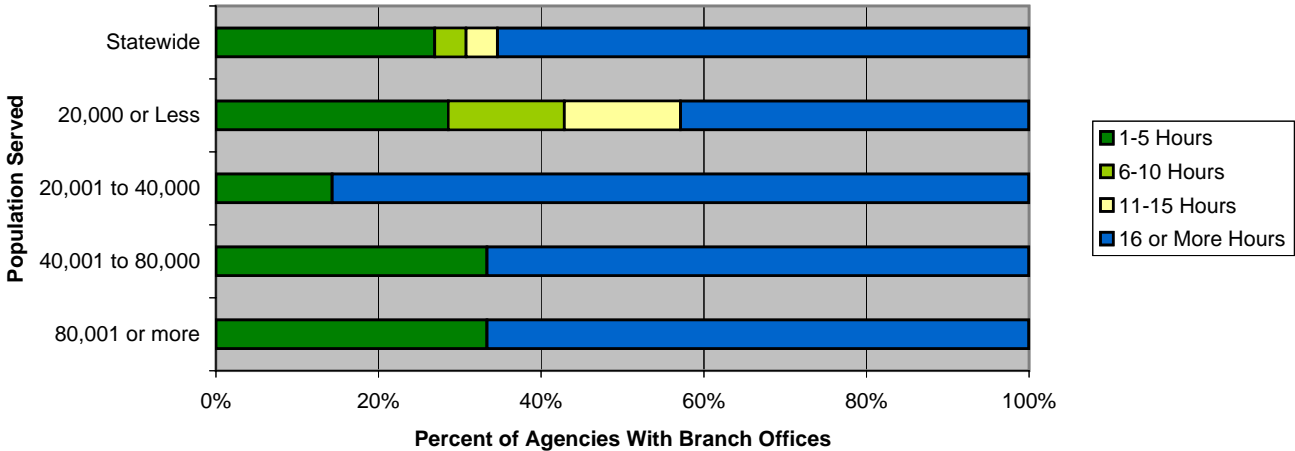
Hours Per Week Main Facility is Open to Serve Clients - 1.1



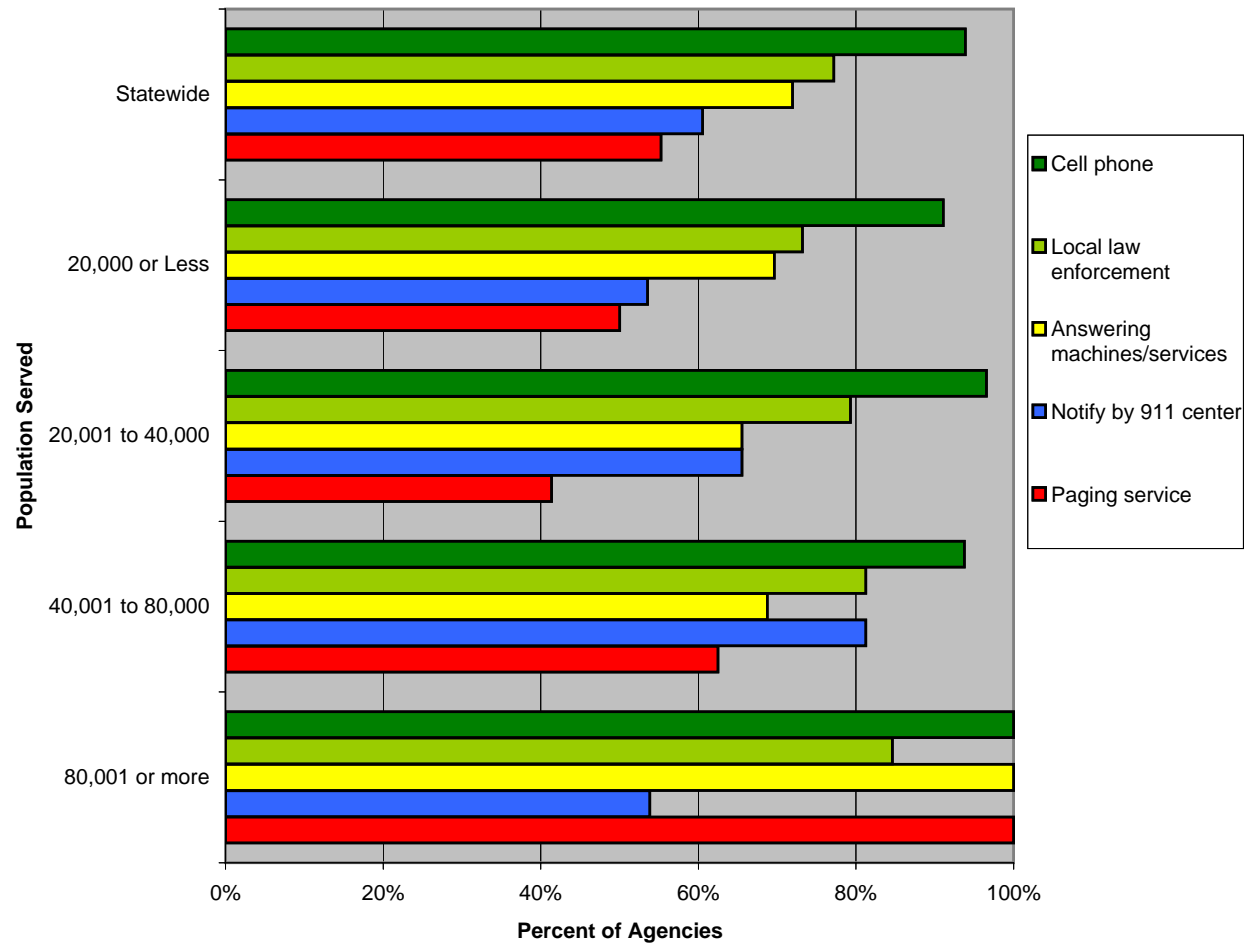
Number of Branch Offices Reported by 26 Agencies - 1.2.1



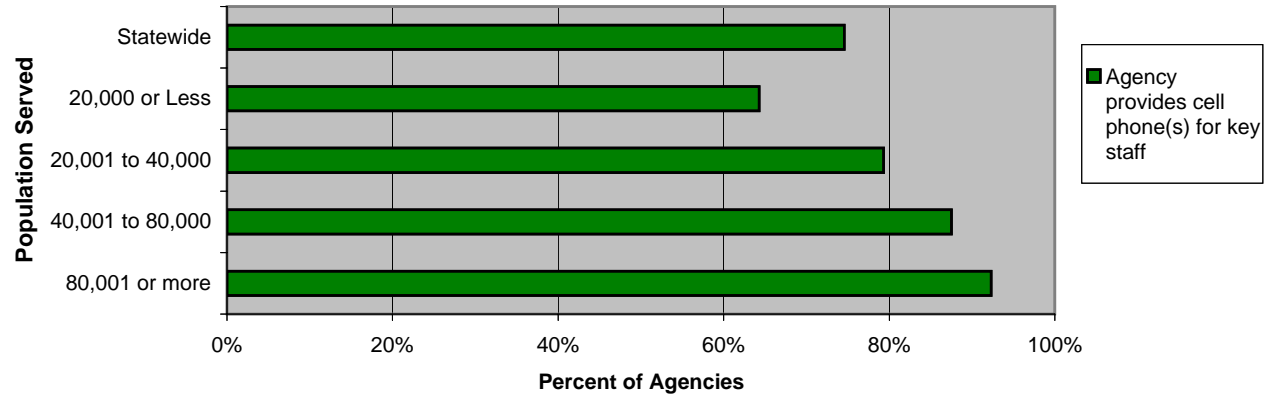
Hours Per Week Branch Offices Are Open Reported by 26 Agencies - 1.2.2



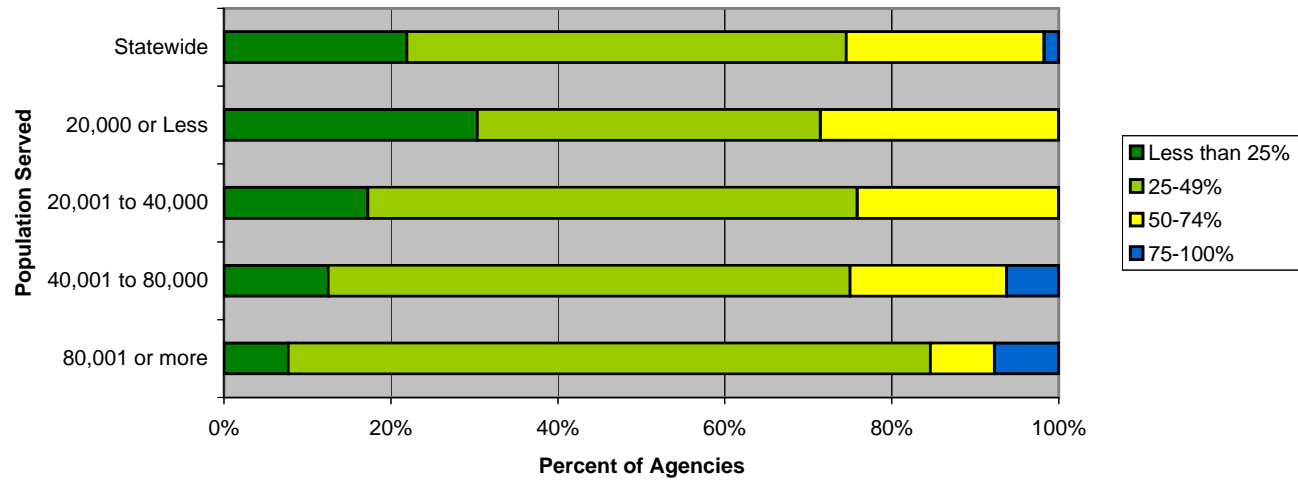
System to Receive and Respond to Emergencies 24/7 - 1.3.1



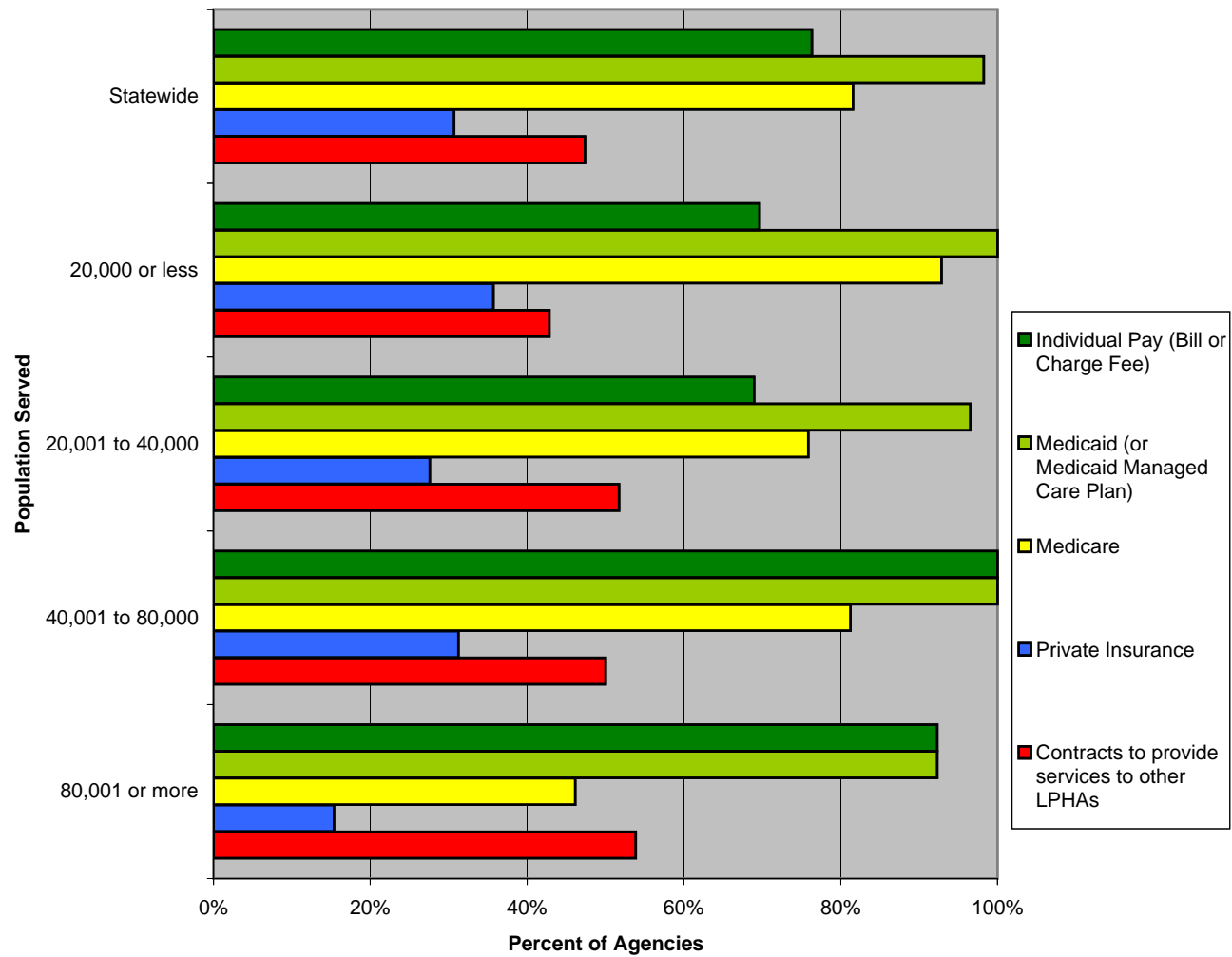
Agency Provides Cell Phone(s) For Key Staff - 1.3.2.1



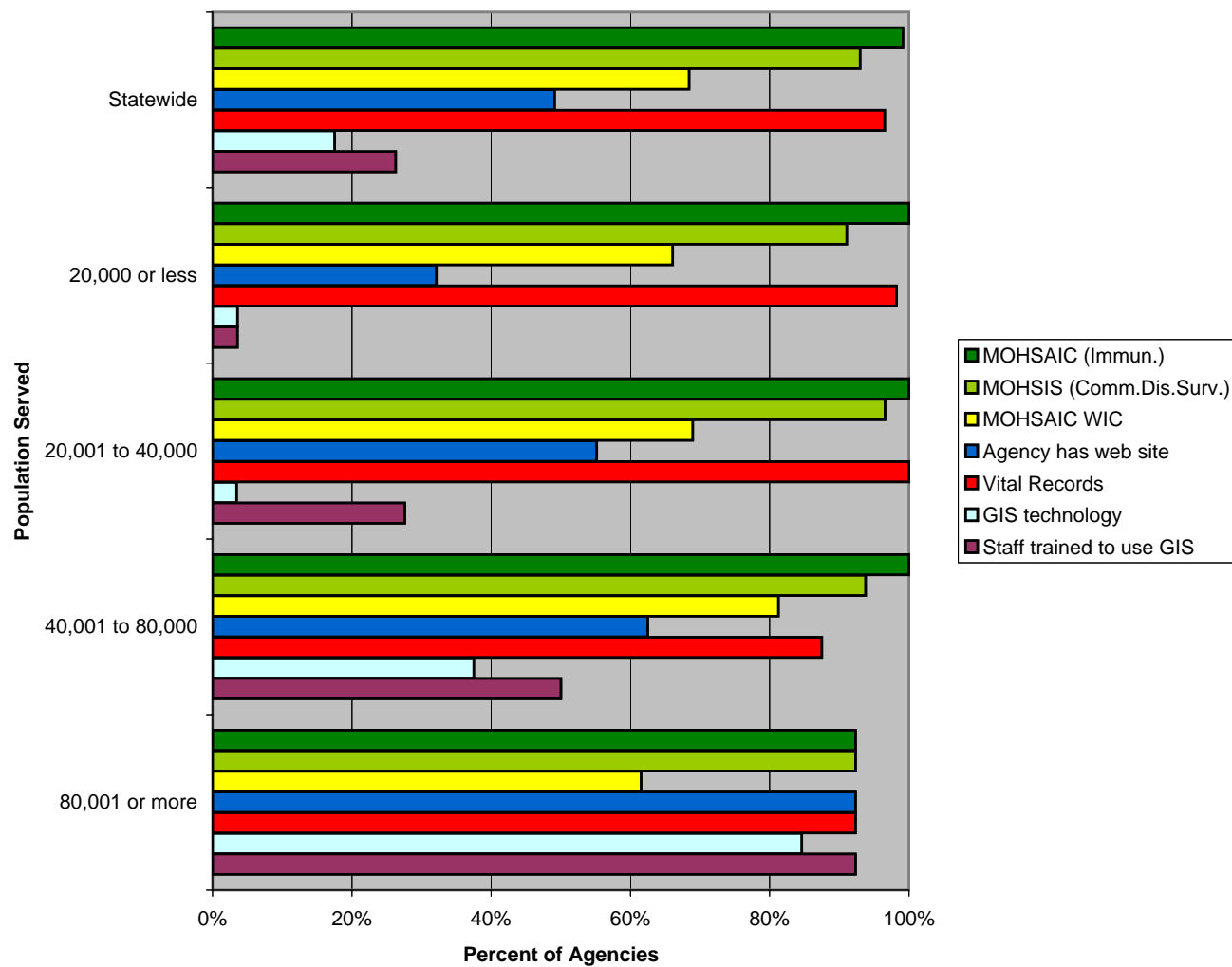
Percent of Agency's Business Conducted Off-Site - 1.4



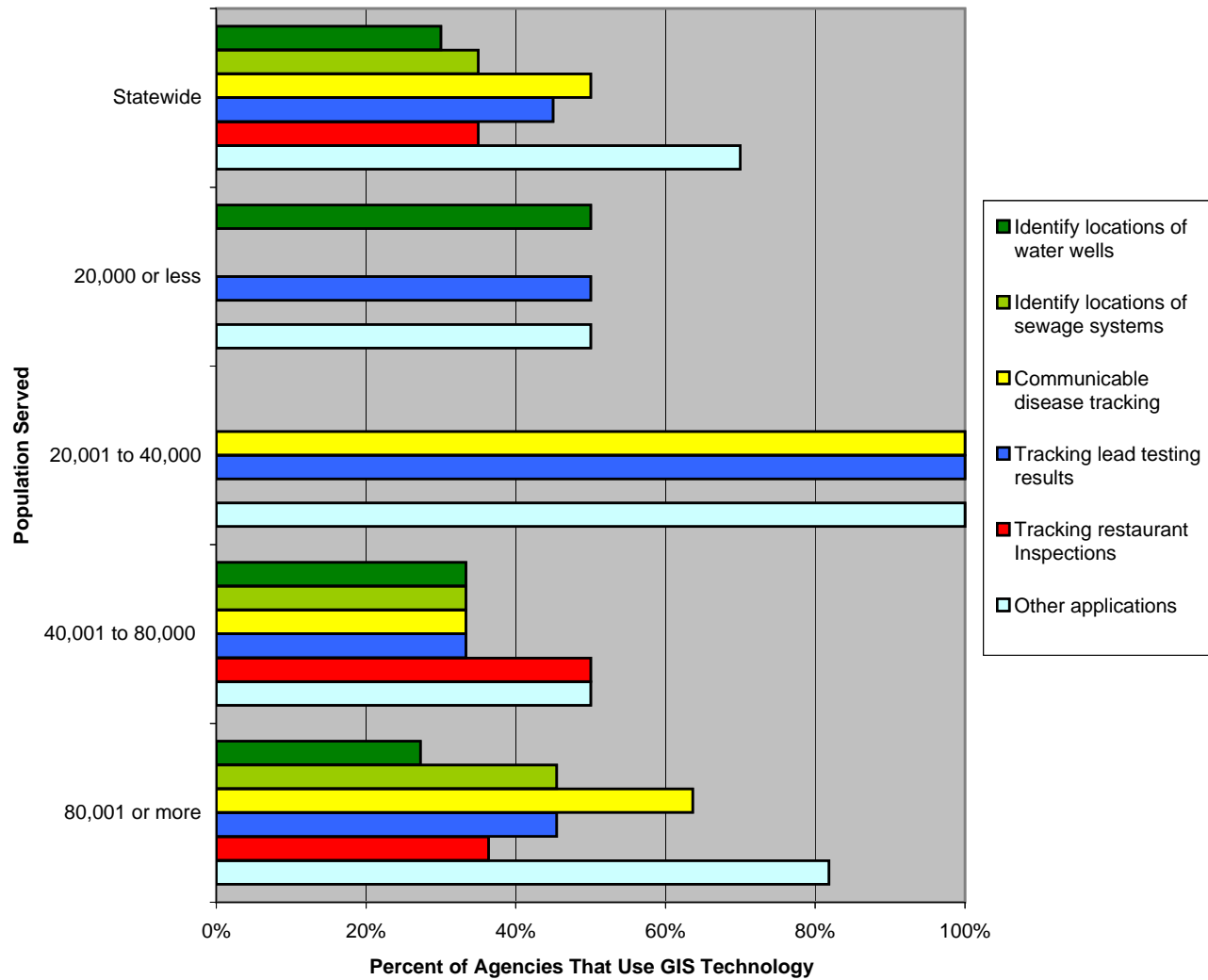
Agency's Sources of Revenue - 2.1



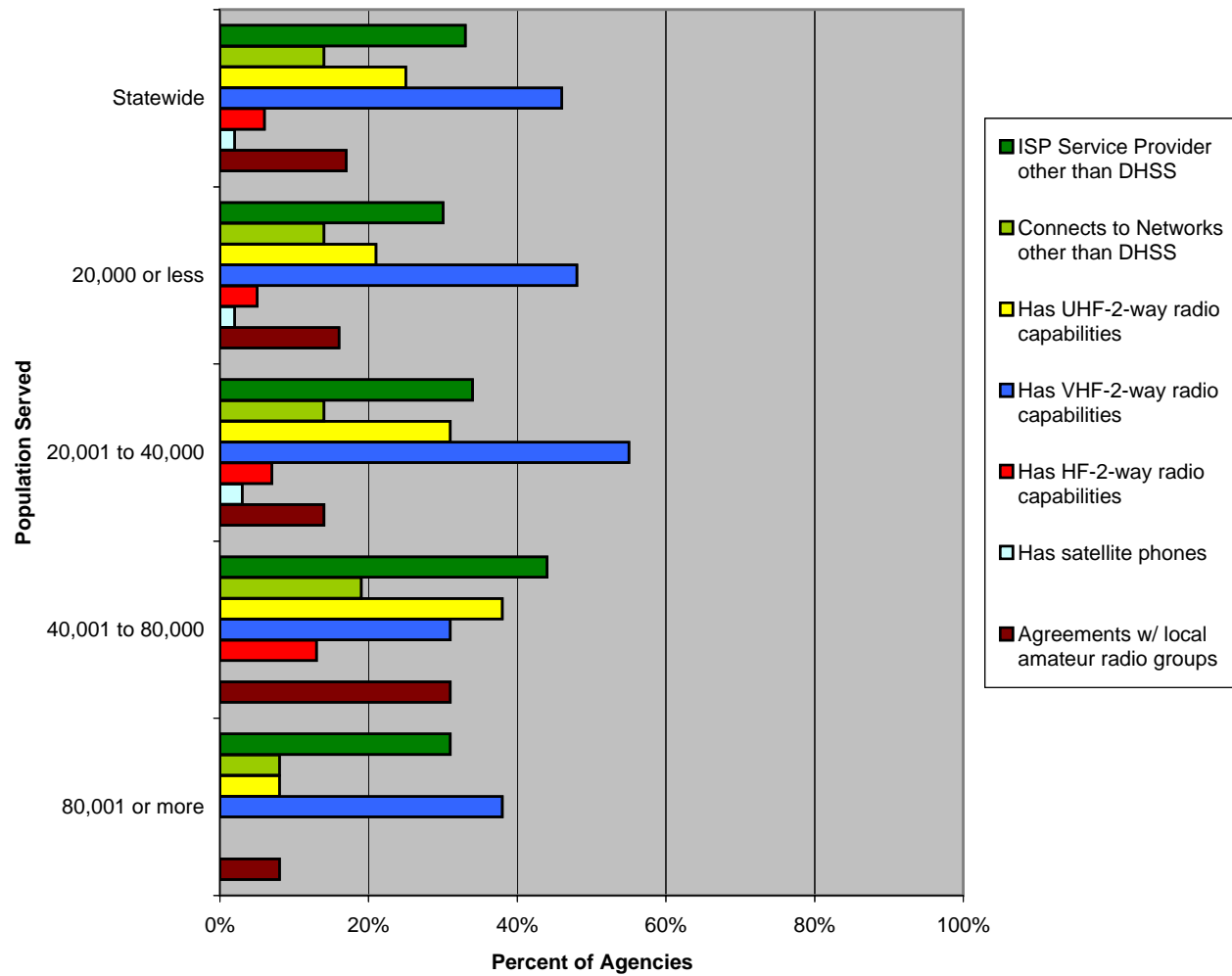
Agency Uses Technology - 3.1.1 thru 3.1.7



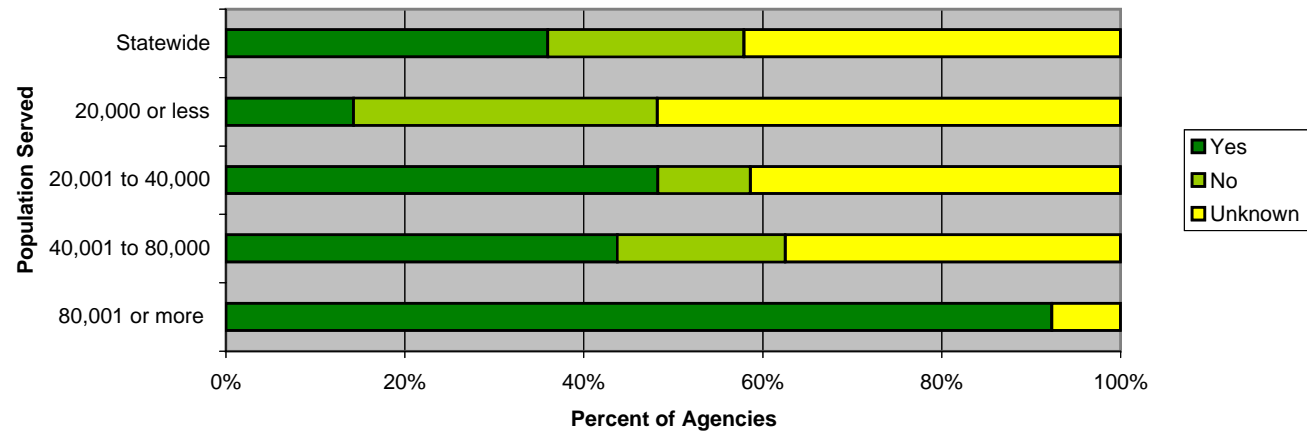
Agency Uses GIS Technology - 3.1.7.1 thru 3.1.7.6



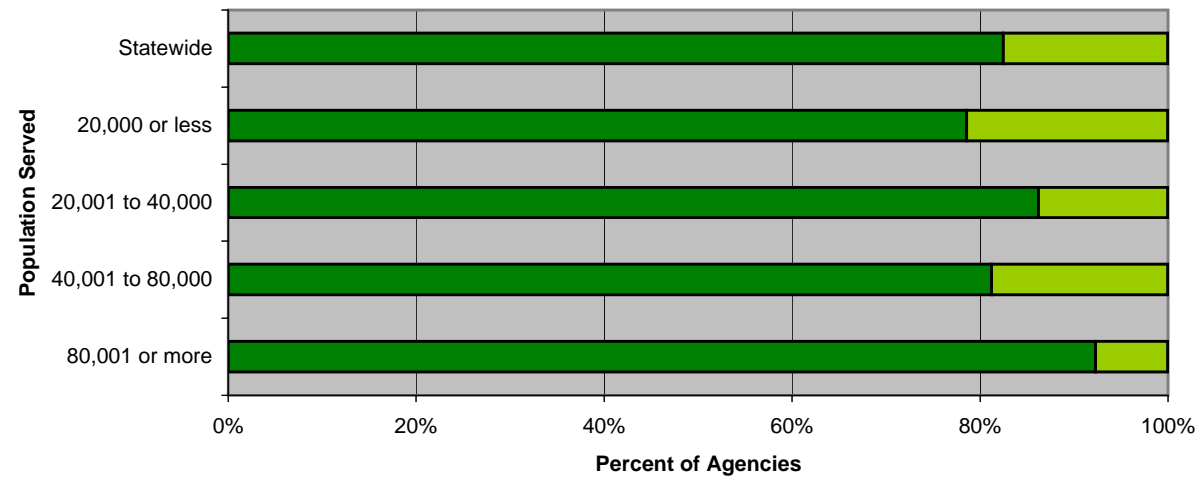
Agency Access to Other Technology - 3.3 thru 3.9



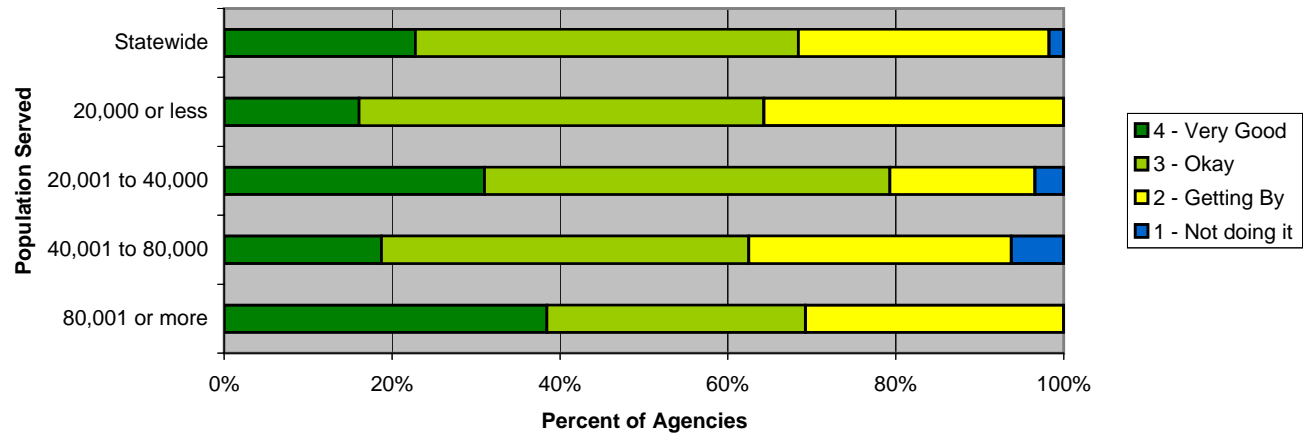
Other Agencies in County Use GIS - 3.10



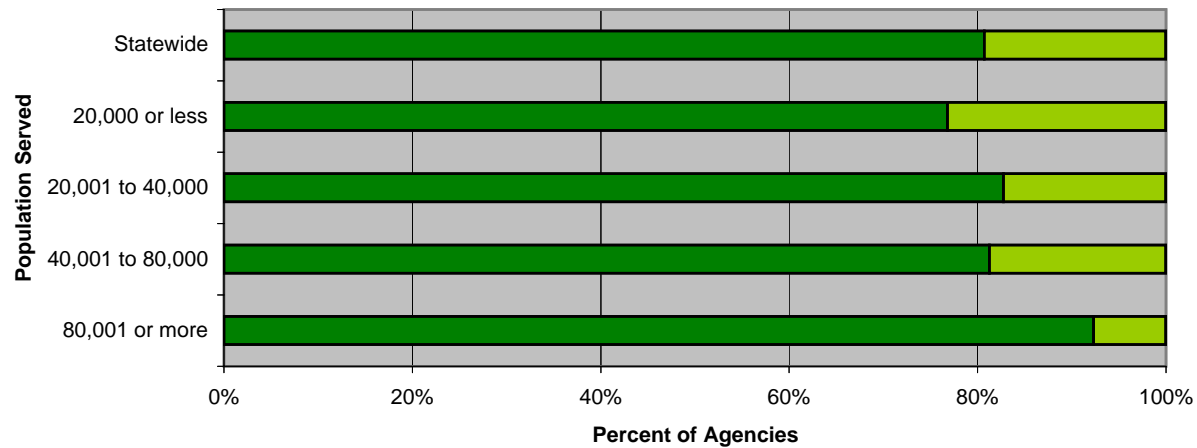
Agency Has Designated Staff Responsible for Quality Improvement - 4.1



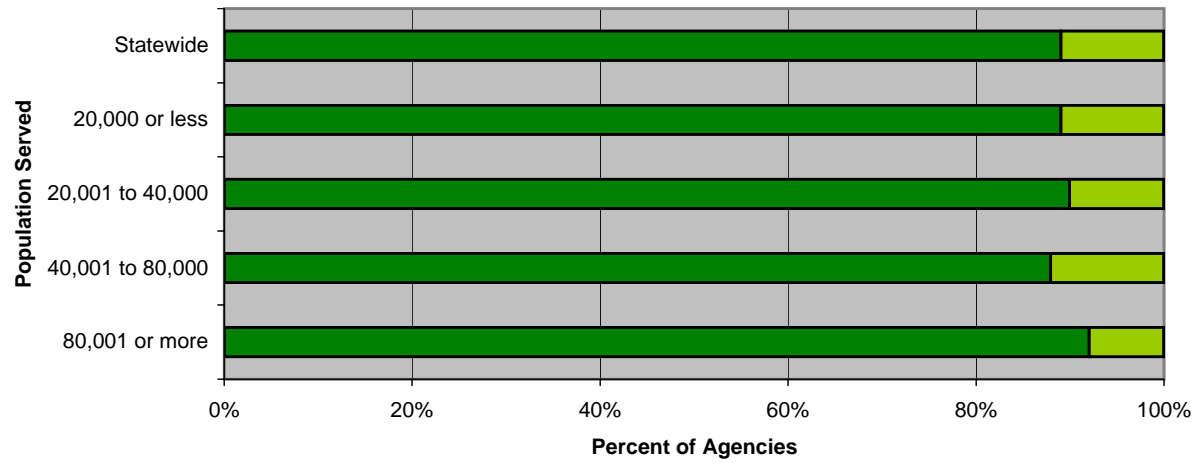
Agency Capacity to Utilize Quality Management Principles, Methods, and Tools Throughout Organization - 4.2



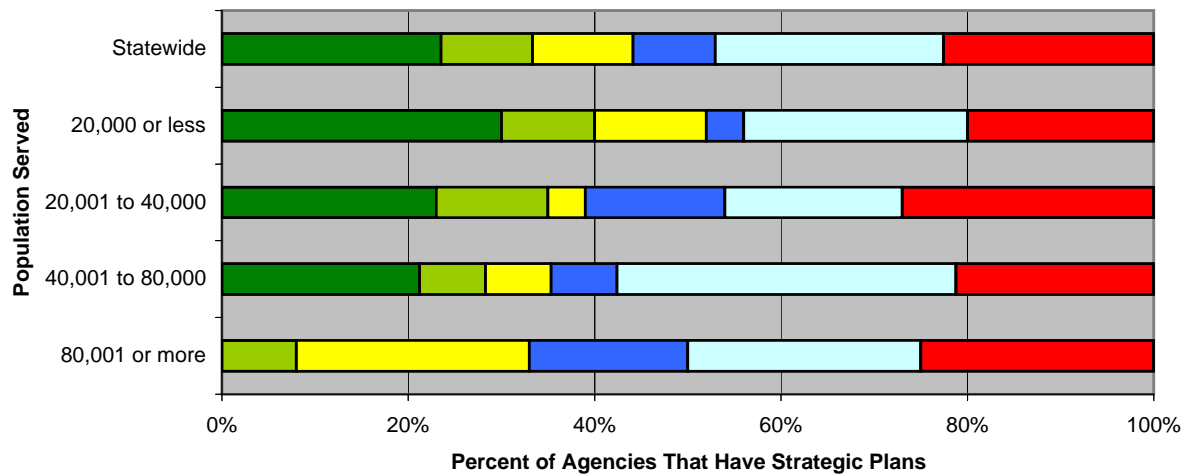
Agency Incorporates Quality Improvement and/or Customer Service in Employees' Performance Expectations - 4.3



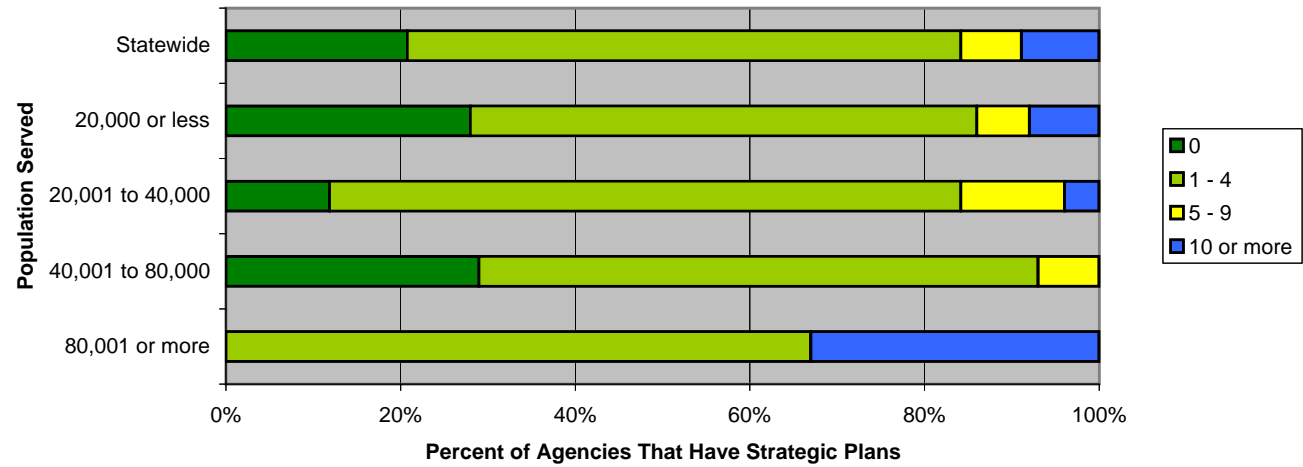
Agency Has a Strategic Plan - 6.1



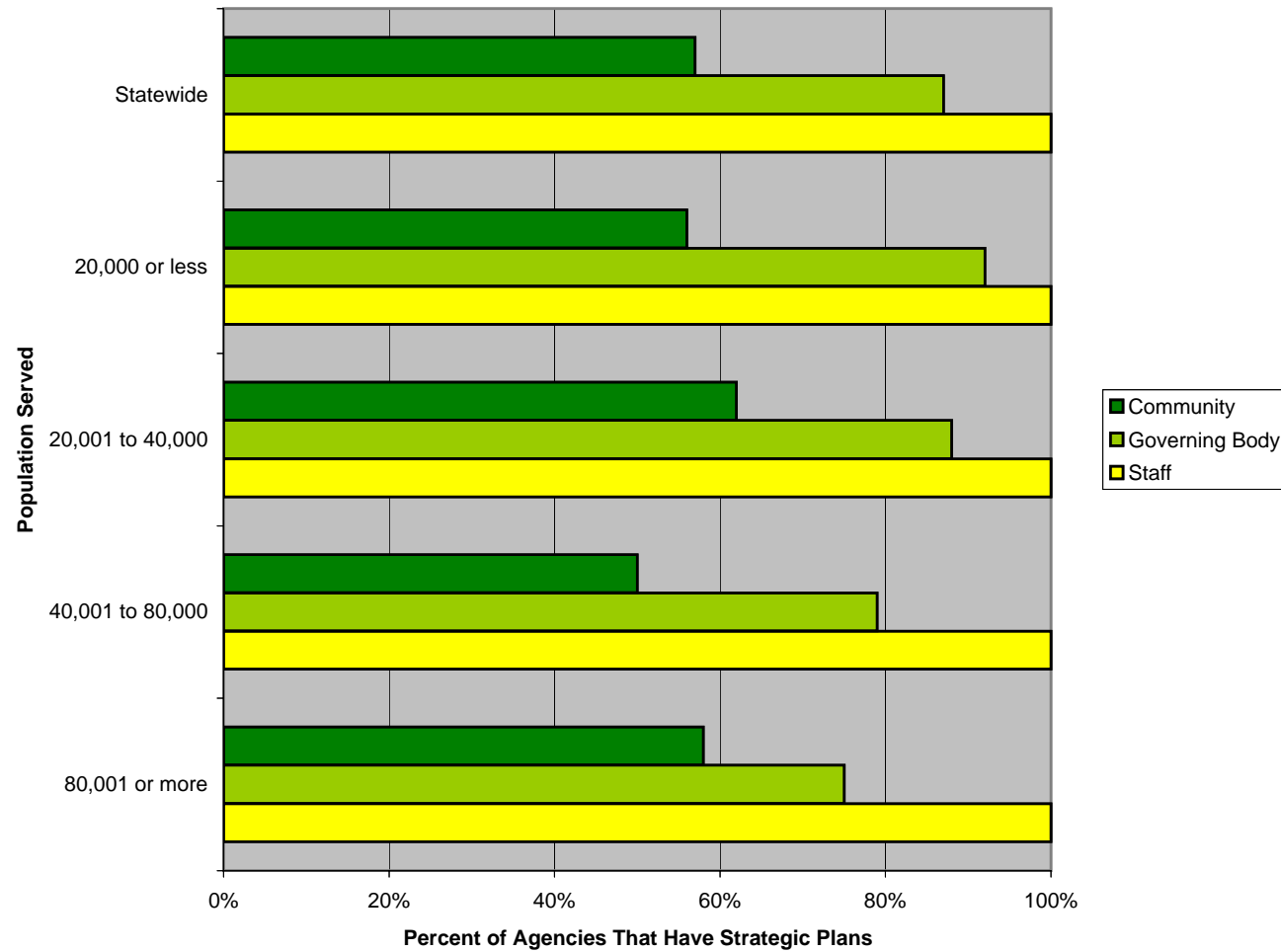
Agency's Strategic Plan Last Updated - 6.1.1



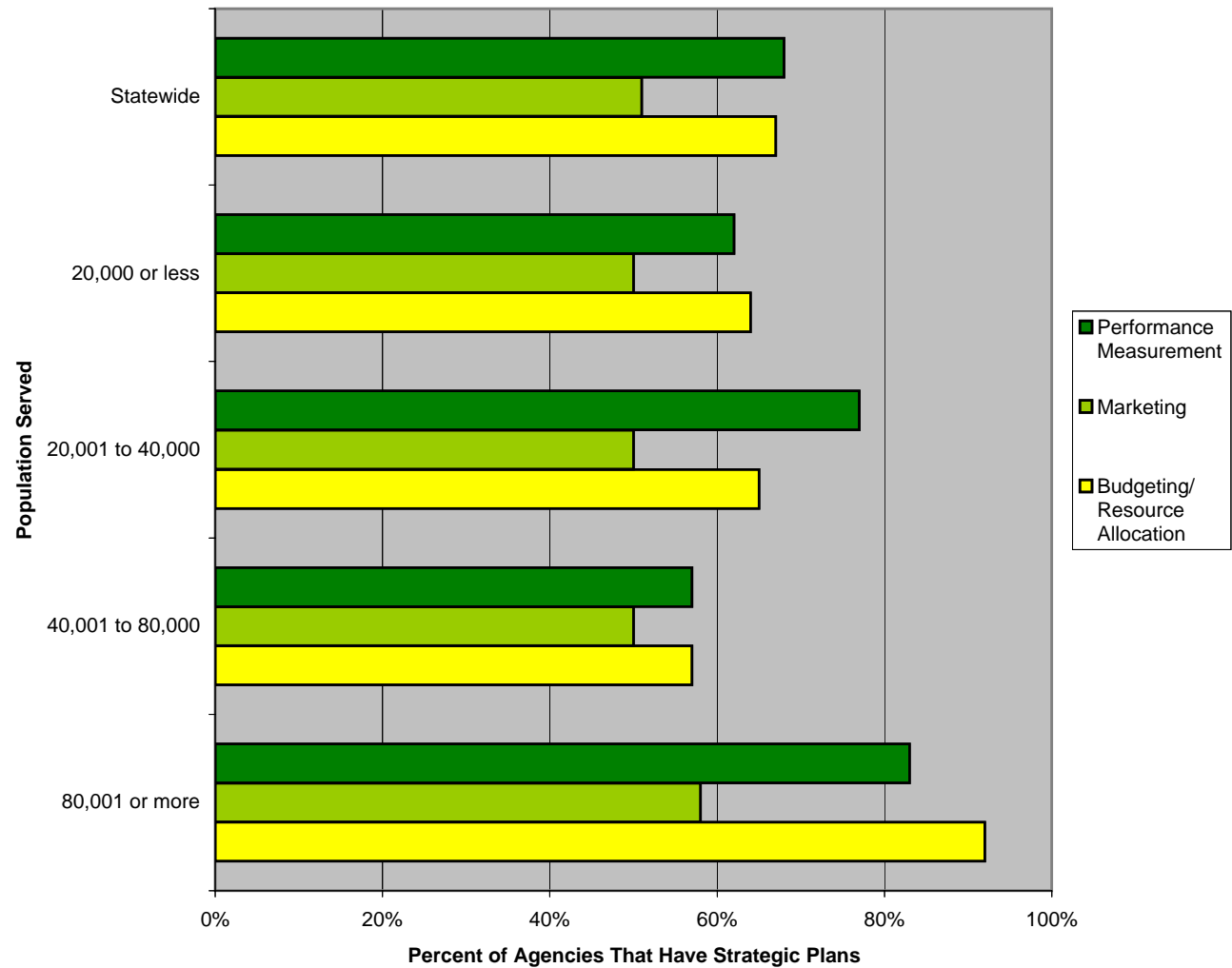
Times During a Year Strategic Plan is Used - 6.1.2



Who Participates in Developing and Revising Agency's Strategic Plan - 6.1.3



How Strategic Plan is Used - 6.1.4



CHAPTER 1

DATA TABLES

ORGANIZATIONAL CAPACITY

1. AVAILABILITY

	Less than 40 Hours		40-44 Hours		45-50 Hours		Over 50 Hours	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1.1. Hours per week main facility is open to serve clients.								
114 Statewide	18	16%	73	64%	18	16%	5	4%
56 Population up to 20,000	9	16%	42	75%	4	7%	1	2%
29 Population between 20,001 and 40,000	6	21%	19	66%	4	14%	0	0%
16 Population between 40,001 and 80,000	3	19%	8	50%	3	19%	2	13%
13 Population over 80,001	0	0%	4	31%	7	54%	2	15%

AVAILABILITY

	Number	Percent
1.2. Health department has branch offices.		
114 Statewide	26	23%
56 Population up to 20,000	7	13%
29 Population between 20,001 and 40,000	7	24%
16 Population between 40,001 and 80,000	6	38%
13 Population over 80,001	6	46%

AVAILABILITY

	1 Site		2-5 Sites		6-10 Sites	
	Number	Percent	Number	Percent	Number	Percent
1.2.1 Number of branch offices.						
114 Statewide	20	77%	4	15%	2	8%
56 Population up to 20,000	7	100%	0	0%	0	0%
29 Population between 20,001 and 40,000	4	57%	3	43%	0	0%
16 Population between 40,001 and 80,000	6	100%	0	0%	0	0%
13 Population over 80,001	3	50%	1	17%	2	33%

AVAILABILITY

	1-5 Hours		6-10 Hours		11-15 Hours		16 or More Hours	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1.2.2. Hours per week branch offices are open to clients.								
114 Statewide	7	27%	1	4%	1	4%	17	65%
56 Population up to 20,000	2	29%	1	14%	1	14%	3	43%
29 Population between 20,001 and 40,000	1	14%	0	0%	0	0%	6	86%
16 Population between 40,001 and 80,000	2	33%	0	0%	0	0%	4	67%
13 Population over 80,001	2	33%	0	0%	0	0%	4	67%

AVAILABILITY

1.3. All Agencies have a system to receive and respond to emergencies 24 hours per day, 7 days per week.

AVAILABILITY

	Paging Service		Cell Phone		Notify 911 Center		Local Law Enforcement		Answering Machines/Service	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1.3.1. Agency has system to receive and respond to emergencies 24/7.										
114 Statewide	63	55%	107	94%	69	61%	88	77%	82	72%
56 Population up to 20,000	28	50%	51	91%	30	54%	41	73%	39	70%
29 Population between 20,001 and 40,000	12	41%	28	97%	19	66%	23	79%	19	66%
16 Population between 40,001 and 80,000	10	63%	15	94%	13	81%	13	81%	11	69%
13 Population over 80,001	13	100%	13	100%	7	54%	11	85%	13	100%

AVAILABILITY

	Cell Phone Provided by Agency	
	Number	Percent
1.3.2.1. Agency provides cell phone(s) for key staff..		
114 Statewide	85	75%
56 Population up to 20,000	36	64%
29 Population between 20,001 and 40,000	23	79%
16 Population between 40,001 and 80,000	14	88%
13 Population over 80,001	12	92%

AVAILABILITY

	Less Than 25%		25-49%		50-74%		75-100%	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent

1.4 Percent of agency's business conducted off-site.

114 Statewide	25	22%	60	53%	27	24%	2	2%
56 Population up to 20,000	17	30%	23	41%	16	29%	0	0%
29 Population between 20,001 and 40,000	5	17%	17	59%	7	24%	0	0%
16 Population between 40,001 and 80,000	2	13%	10	63%	3	19%	1	6%
13 Population over 80,001	1	8%	10	77%	1	8%	1	8%

2. SOURCE OF REVENUE

	Medicaid (or Managed Care)		Medicare		Individual Pay		Private Insurance		Contracts Services to Other LPHAs	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent

2.1 Agency's sources of revenue.

114 Statewide	112	98%	93	82%	87	76%	35	31%	54	47%
56 Population up to 20,000	56	100%	52	93%	39	70%	20	36%	24	43%
29 Population between 20,001 and 40,000	28	97%	22	76%	20	69%	8	28%	15	52%
16 Population between 40,001 and 80,000	16	100%	13	81%	16	100%	5	31%	8	50%
13 Population over 80,001	12	92%	6	46%	12	92%	2	15%	7	54%

3. TECHNOLOGY

	Number	Percent
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3.1.1. Agency Uses MOHSAIC (Immunizations).

114 Statewide	113	99%
56 Population up to 20,000	56	100%
29 Population between 20,001 and 40,000	29	100%
16 Population between 40,001 and 80,000	16	100%
13 Population over 80,001	12	92%

TECHNOLOGY

	Number	Percent
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3.1.2. Agency Uses MOHSIS (Communicable Disease Surveillance).

114 Statewide	106	93%
56 Population up to 20,000	51	91%
29 Population between 20,001 and 40,000	28	97%
16 Population between 40,001 and 80,000	15	94%
13 Population over 80,001	12	92%

TECHNOLOGY

	Number	Percent
3.1.3. Agency Uses MOHSAIC for WIC.		
114 Statewide	78	68%
56 Population up to 20,000	37	66%
29 Population between 20,001 and 40,000	20	66%
16 Population between 40,001 and 80,000	13	81%
13 Population over 80,001	8	62%

TECHNOLOGY

	Number	Percent
3.1.4. Agency has a web site.		
114 Statewide	56	49%
56 Population up to 20,000	18	32%
29 Population between 20,001 and 40,000	16	55%
16 Population between 40,001 and 80,000	10	63%
13 Population over 80,001	12	92%

TECHNOLOGY

	Number	Percent
3.1.5. Agency uses Vital Records.		
114 Statewide	110	96%
56 Population up to 20,000	55	98%
29 Population between 20,001 and 40,000	29	100%
16 Population between 40,001 and 80,000	14	88%
13 Population over 80,001	12	92%

TECHNOLOGY

	Number	Percent
3.1.6. Agency uses GIS technology.		
114 Statewide	20	18%
56 Population up to 20,000	2	4%
29 Population between 20,001 and 40,000	1	3%
16 Population between 40,001 and 80,000	6	38%
13 Population over 80,001	11	85%

TECHNOLOGY

	Number	Percent
3.1.7. Agency has staff trained to use GIS technology.		
114 Statewide	30	26%
56 Population up to 20,000	2	4%
29 Population between 20,001 and 40,000	8	28%
16 Population between 40,001 and 80,000	8	50%
13 Population over 80,001	12	92%

TECHNOLOGY

	Number	Percent
3.1.7.1. Agency uses GIS technology to identify locations of water wells.		
114 Statewide	6	30%
56 Population up to 20,000	1	50%
29 Population between 20,001 and 40,000	0	0%
16 Population between 40,001 and 80,000	2	33%
13 Population over 80,001	3	27%

TECHNOLOGY

	Number	Percent
3.1.7.2. Agency uses GIS technology to identify locations of sewage systems.		
114 Statewide	7	35%
56 Population up to 20,000	0	0%
29 Population between 20,001 and 40,000	0	0%
16 Population between 40,001 and 80,000	2	33%
13 Population over 80,001	5	45%

TECHNOLOGY

	Number	Percent
3.1.7.3. Agency uses GIS technology for communicable disease tracking.		
114 Statewide	10	50%
56 Population up to 20,000	0	0%
29 Population between 20,001 and 40,000	1	100%
16 Population between 40,001 and 80,000	2	33%
13 Population over 80,001	7	64%

TECHNOLOGY

	Number	Percent
3.1.7.4. Agency uses GIS technology for tracking lead testing results.		
114 Statewide	9	45%
56 Population up to 20,000	1	50%
29 Population between 20,001 and 40,000	1	100%
16 Population between 40,001 and 80,000	2	33%
13 Population over 80,001	5	45%

TECHNOLOGY

	Number	Percent
3.1.7.5. Agency uses GIS technology for tracking restaurant inspections.		
114 Statewide	7	35%
56 Population up to 20,000	0	0%
29 Population between 20,001 and 40,000	0	0%
16 Population between 40,001 and 80,000	3	50%
13 Population over 80,001	4	36%

TECHNOLOGY

	Number	Percent
3.1.7.6. Agency uses GIS technology for other applications.		
114 Statewide	14	70%
56 Population up to 20,000	1	50%
29 Population between 20,001 and 40,000	1	100%
16 Population between 40,001 and 80,000	3	50%
13 Population over 80,001	9	82%

TECHNOLOGY

	Number	Percent
3.3. Does your Health Department have an Internet Service Provider (ISP) other than DHSS?		
114 Statewide	38	33%
56 Population up to 20,000	17	30%
29 Population between 20,001 and 40,000	10	34%
16 Population between 40,001 and 80,000	7	44%
13 Population over 80,001	4	31%

TECHNOLOGY

	Number	Percent
3.4. Does your Health Department connect to networks (County network, Morenet, etc.) other than DHSS?		
114 Statewide	16	14%
56 Population up to 20,000	8	14%
29 Population between 20,001 and 40,000	4	14%
16 Population between 40,001 and 80,000	3	19%
13 Population over 80,001	1	8%

TECHNOLOGY

	Number	Percent
3.5. Does your Health Department have UHF-2-way Radio capabilities?		
114 Statewide	28	25%
56 Population up to 20,000	12	21%
29 Population between 20,001 and 40,000	9	31%
16 Population between 40,001 and 80,000	6	38%
13 Population over 80,001	1	8%

TECHNOLOGY

	Number	Percent
3.6. Does your Health Department have VHF-2-way Radio capabilities?		
114 Statewide	53	46%
56 Population up to 20,000	27	48%
29 Population between 20,001 and 40,000	16	55%
16 Population between 40,001 and 80,000	5	31%
13 Population over 80,001	5	38%

TECHNOLOGY

	Number	Percent
3.7. Does your Health Department have HF-2-way Radio capabilities?		
114 Statewide	7	6%
56 Population up to 20,000	3	5%
29 Population between 20,001 and 40,000	2	7%
16 Population between 40,001 and 80,000	2	13%
13 Population over 80,001	0	0%

TECHNOLOGY

	Number	Percent
3.8. Does your Health Department have satellite phones?		
114 Statewide	2	2%
56 Population up to 20,000	1	2%
29 Population between 20,001 and 40,000	1	3%
16 Population between 40,001 and 80,000	0	0%
13 Population over 80,001	0	0%

TECHNOLOGY

	Number	Percent
3.9. Does your Health Department have agreements with local amateur radio groups?		
114 Statewide	19	17%
56 Population up to 20,000	9	16%
29 Population between 20,001 and 40,000	4	14%
16 Population between 40,001 and 80,000	5	31%
13 Population over 80,001	1	8%

TECHNOLOGY

	Yes		No		Unknown	
	Number	Percent	Number	Percent	Number	Percent
3.10. Other agencies in your county use GIS						
114 Statewide	41	36%	25	22%	48	42%
56 Population up to 20,000	8	14%	19	34%	29	52%
29 Population between 20,001 and 40,000	14	48%	3	10%	12	41%
16 Population between 40,001 and 80,000	7	44%	3	19%	6	38%
13 Population over 80,001	12	92%	0	0%	1	8%

4. QUALITY IMPROVEMENT

	Number	Percent
4.1. Agency has designated staff responsible for planning, developing and implementing quality improvement methods across programs.		
114 Statewide	94	82%
56 Population up to 20,000	44	79%
29 Population between 20,001 and 40,000	25	86%
16 Population between 40,001 and 80,000	13	81%
13 Population over 80,001	12	92%

QUALITY IMPROVEMENT

	Very Good		OK		Getting By		Not Doing It	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
4.2. Rate of agency capacity to utilize quality management principles, methods, and tools throughout the organization.								
114 Statewide	26	23%	52	46%	34	30%	2	2%
56 Population up to 20,000	9	16%	27	48%	20	36%	0	0%
29 Population between 20,001 and 40,000	9	31%	14	48%	5	17%	1	3%
16 Population between 40,001 and 80,000	3	19%	7	44%	5	31%	1	6%
13 Population over 80,001	5	38%	4	31%	4	31%	0	0%

QUALITY IMPROVEMENT

	Number	Percent
4.3. Agency incorporates quality improvement and/or customer service in all employee's performance expectations.		
114 Statewide	92	81%
56 Population up to 20,000	43	77%
29 Population between 20,001 and 40,000	24	83%
16 Population between 40,001 and 80,000	13	81%
13 Population over 80,001	12	92%

DATA TABLES

STRATEGIC PLANNING

6. STRATEGIC PLAN

	Number	Percent
6.1. Agency has a strategic plan.		
114 Statewide	102	89%
56 Population up to 20,000	50	89%
29 Population between 20,001 and 40,000	26	90%
16 Population between 40,001 and 80,000	14	88%
13 Population over 80,001	12	92%

STRATEGIC PLAN

	1999		2000		2001		2002		2003		2004	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
6.1.1. Year agency's strategic plan was last updated.												
114 Statewide	24	24%	10	10%	11	11%	9	9%	25	25%	23	23%
56 Population up to 20,000	15	30%	5	10%	6	12%	2	4%	12	24%	10	20%
29 Population between 20,001 and 40,000	6	23%	3	12%	1	4%	4	15%	5	19%	7	27%
16 Population between 40,001 and 80,000	3	21%	1	7%	1	7%	1	7%	5	36%	3	21%
13 Population over 80,001	0	0%	1	8%	3	25%	2	17%	3	25%	3	25%

STRATEGIC PLAN

	0		1-4 Times		5-9 Times		10 or More Times	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
6.1.2. How often during a year do you/your staff refer to or use the strategic plan?								
114 Statewide	21	21%	65	64%	7	7%	9	9%
56 Population up to 20,000	14	28%	29	58%	3	6%	4	8%
29 Population between 20,001 and 40,000	3	12%	19	73%	3	12%	1	4%
16 Population between 40,001 and 80,000	4	29%	9	64%	1	7%	0	0%
13 Population over 80,001	0	0%	8	67%	0	0%	4	33%

STRATEGIC PLAN

	Community		Governing Body		Staff	
	Number	Percent	Number	Percent	Number	Percent
6.1.3. Who participates in developing and revising agency's strategic plan?						
114 Statewide	58	57%	89	87%	102	100%
56 Population up to 20,000	28	56%	46	92%	50	100%
29 Population between 20,001 and 40,000	16	62%	23	88%	26	100%
16 Population between 40,001 and 80,000	7	50%	11	79%	14	100%
13 Population over 80,001	7	58%	9	75%	12	100%

STRATEGIC PLAN

	Budgeting/Resource Allocation		Marketing		Performance Measurement	
	Number	Percent	Number	Percent	Number	Percent
6.1.4. How is strategic plan used?						
114 Statewide	68	67%	52	51%	69	68%
56 Population up to 20,000	32	64%	25	50%	31	62%
29 Population between 20,001 and 40,000	17	65%	13	50%	20	77%
16 Population between 40,001 and 80,000	8	57%	7	50%	8	57%
13 Population over 80,001	11	92%	7	58%	10	83%

CHAPTER 2

I. SUMMARY OF FINDINGS RELATED TO LOCAL PUBLIC HEALTH AGENCY WORKFORCE – 2004

The size of the local public health agency workforce decreased in each of the past three years. From 2001 to 2002, the total number decreased by ninety-seven. From 2002 to 2003, the number decreased again by thirty-six in spite of the fact that, during 2003, approximately 70 planners, epidemiology specialists, or public information officers were hired into these federally funded new positions intended to improve preparedness to respond to public health emergencies. From 2003 to 2004, total local public health workforce again decreased by 295 from 3217 to 2922. The most significant decline was in the “other” category of staff. There were smaller decreases in the number of registered nurses and in clerical support staff. The benefits provided for local public health employees remained stable, and there were increases in the average annual salary earned by several categories of staff including administrators. (See chart at the end of this chapter that shows the breakdown of types of local agency staff.)

TOTAL LOCAL PUBLIC HEALTH WORKFORCE

Local public health agencies in Missouri employ 2922 individuals, 82% of whom work full-time. Moderate turnover in staff is verified by the fact that 13% of the current workforce was hired within the past year. (See Graphs 7.1 & 7.2 and Data Tables 7.1 & 7.2)

BENEFITS FOR LOCAL PUBLIC HEALTH WORKERS

Full time workers in 94% of local public health agencies have health insurance; however, slightly fewer agencies (92%) contribute to payment of premiums. Forty-four percent (44%) of full time local public health workers have access to coverage for dental health services, but only 34% of agencies contribute to dental insurance cost. Ninety percent (90%) of full-time staff in local public health agencies has an available retirement program. Ninety-eight percent (98%) of full time public health workers receive paid sick and 99% have paid vacation leave. (See Graphs 7.3 & 7.4 and Data Tables 7.3 & 7.4)

PROFESSIONAL DEVELOPMENT

Ninety-eight percent (98%) of the local agencies have staff that participates in continuing education. Computer-based training is utilized by staff in 90% of agencies and 94% of agencies' staff utilize satellite education programs. Fewer agencies (49%) have staff that utilizes college courses as a means of professional development, and even fewer (32%) of agencies reimburse their employees for college tuition. Forty-six percent (46%) of agencies pay for other kinds of continuing education for staff and 39% pay staff while on leave to attend educational training. (See Graphs 7.3 & 7.5 and Data Tables 7.3 & 7.5)

ADMINISTRATORS

Forty-five percent (45%) of local public health agency administrators are registered nurses, and an additional 4% are nurse practitioners. Fifty-five percent (55%) of administrators devote all of their time to administrative duties (down from 57% in 2003), and an additional 21% spend three-quarters or more of their time on administration. The range of educational levels of administrators is wide, from 18% with high school as their highest level of formal education to

24% with master's or doctorate degrees. Fifty-three percent (53%) of administrators have a bachelor's degree or above, and an additional 11% are working towards a bachelor's degree. Twenty-five percent (25%) of administrators have been working in their present job for 2 years or less, and nearly half (47%) of administrators have been the administrator for 5 years or less. The range of annual salary earned by administrators is wide, from less than \$30,000 (7% of administrators) to over \$75,000 (10% of administrators). The largest percentage of administrators (41%) reportedly earn from \$40,000 to \$54,999 annually. An additional 28% earn in the range from \$30,000 to \$39,999. (See Graphs 7.6.3 thru 7.6.7 and Data Tables 7.6.1 thru 7.6.7)

NURSES

Nurses continue to represent the largest category of local agency staff (27% of the local public health agency workforce) with a total of 777. There are an additional 51 registered nurses that serve as administrator for their agency. Of the 777 with nursing as their primary focus, 86% are registered nurses and 14% are licensed practical nurses. Seventy-seven percent (77%) work full time. Twenty-nine percent (29%) have a bachelor's degree in nursing, 4% have a master's degree, and 4% are certified as community health nurses. Sixty-three nurses (9%) are working toward a higher degree. All RNs with a degree in nursing have completed a course in the principles of community health nursing as part of their curriculum. An additional 48 RNs have also completed such a course. Sixty-eight percent (68%) of all full and part time RNs are reportedly practicing population-based public health nursing. (See Graphs 7.7.1 thru 7.8.1 and Data Tables 7.7.1 thru 7.8.1.1)

Seventy-eight percent (78%) of agencies pay their full-time registered nurses an average annual salary of \$30,000 or more (up from 73% in 2003) and 22% pay between \$20,000 and \$29,999. (See Graph 7.7.7 and Data Table 7.7.7)

Fifty-two percent (52%) of agencies have licensed practical nurses (LPNs) on staff. LPNs make up 4% of the local public health workforce. Earnings by full-time LPNs are mainly (82%) in the range from \$20,000 to \$29,999. (See Graphs 7.8.1 & 7.8.2 and Data Tables 7.8.1 & 7.8.2)

ENVIRONMENTAL PUBLIC HEALTH SPECIALISTS

Most agencies (86%) have environmental public health specialists on staff. This group represents the third largest category of local agency staff after nurses and clerical workers (12% of local public health workforce), with a total of 338. Eighty-six percent (86%) of environmental public health specialists work full time. Seventy-two percent (72%) of environmental specialists have a bachelor's degree, and 10% have post graduate degrees. More agencies (60%) pay environmental staff an average annual salary between \$30,000 and \$39,999; 29% pay in the range from \$20,000 to \$29,999. Sixty-eight (68) environmental health workers (20%) are reportedly state certified. Fourteen (14) environmental health workers (4%) reportedly have national registration. (See Graphs 7.9.1 thru 7.9.4 and Data Tables 7.9.1 thru 7.9.4.2)

NUTRITIONISTS

Eighty-one (81) local public health agencies employ 97 nutritionists (3% of local agency workforce). Fifty-one percent (51%) of staff in these positions work full time. Ninety-four

percent (94%) of nutritionists have a bachelor's degree or above. Forty-three percent (43%) of full-time nutritionists earn an average annual salary range in the range \$30,000 to \$39,999, 10% earn more than \$40,000 annually, and 48% earn in the range from \$20,000 to \$29,999. (See Graphs 7.10.1 thru 7.10.3 and Data Tables 7.10.1 thru 7.10.3)

DIETICIANS

Twenty-six (26) local public health agencies employ dietitians, 70% of which work full time. Ninety-one percent (91%) have a bachelor's degree or above, and 70% are registered dietitians. The majority (69%) of full-time dietitians earn an average annual salary in the range from \$30,000 to \$39,999. (See Graphs 7.11.1 thru 7.11.3 and Data Tables 7.11.1 thru 7.11.4)

HEALTH EDUCATORS

Only (39%) of local public health agencies employ individuals as health educators. Sixty-eight percent (68%) of the 79 health educators work full time. Sixty-two percent (62%) of health educators have a bachelor's degree, 26% have a master's degree or above, and 10 of the 79 (13%) are Certified Health Education Specialists. Over half (56%) of full-time health educators earn an average annual salary between \$20,000 and \$29,999, 26% earn between \$30,000 and \$39,999, and the remainder earn over \$40,000. (See Graphs 7.12.1 thru 7.12.4 and Data Tables 7.12.1 thru 7.12.4)

SOCIAL WORKERS

Twenty (20) local public health agencies employ social workers. Of the 38 employed, 71% work full-time. Nineteen social workers (50%) are licensed. Eighty-two percent (82%) have a bachelor's degree or above. More social workers (47%) earn an average annual salary in the range from \$30,000 to \$39,999, 33% earn between \$20,000 and \$29,999, and the remainder (20%) earn over \$40,000. (See Graphs 7.13.1 thru 7.13.4 and Data Tables 7.13.1 thru 7.13.4)

SUPPORT STAFF

Clerical support staff makes up 24% of local agency workforce, the second largest category. The 689 individuals (down from 775 in 2003) are primarily full-time employees (88%) and are the lowest paid. Thirty-two percent (32%) of full-time clerical workers earn an average annual salary less than \$20,000; 66% earn in the range \$20,000 to \$29,999. The highest education completed by 87% of the clerical workforce is high school; 10% have an associate degree, and 3% have a bachelor's degree. (See Graphs 7.14.1 thru 7.14.3 and Data Tables 7.14.1 thru 7.14.3)

EPIDEMIOLOGY SPECIALISTS

Twenty-two (22) local public health agencies employ Epidemiology Specialists; all of them work full time. Forty percent (40%) have a bachelor's degree and 50% have a master's or doctorate degree. Forty-five percent (45%) earn an average annual salary in the range from \$30,000 to \$39,999 most of the rest earn over \$40,000. (See Graphs 7.15.2 thru 7.15.3 and Data Tables 7.15.1 thru 7.15.3)

EMERGENCY RESPONSE PLANNERS

Thirty-two (32) agencies employ emergency response planners; 88% are employed full time. Fifty-nine percent (59%) of planners have a bachelor's degree and 29% have a master's

degree. Emergency response planners mainly (69%) earn average annual salaries in the range from \$40,000 to \$54,999; 28% earn in the \$30,000 to \$39,999 range. (See Graphs 7.16.1 thru 7.16.3 and Data Tables 7.16.1 thru 7.16.3)

PHYSICIANS AND DENTISTS

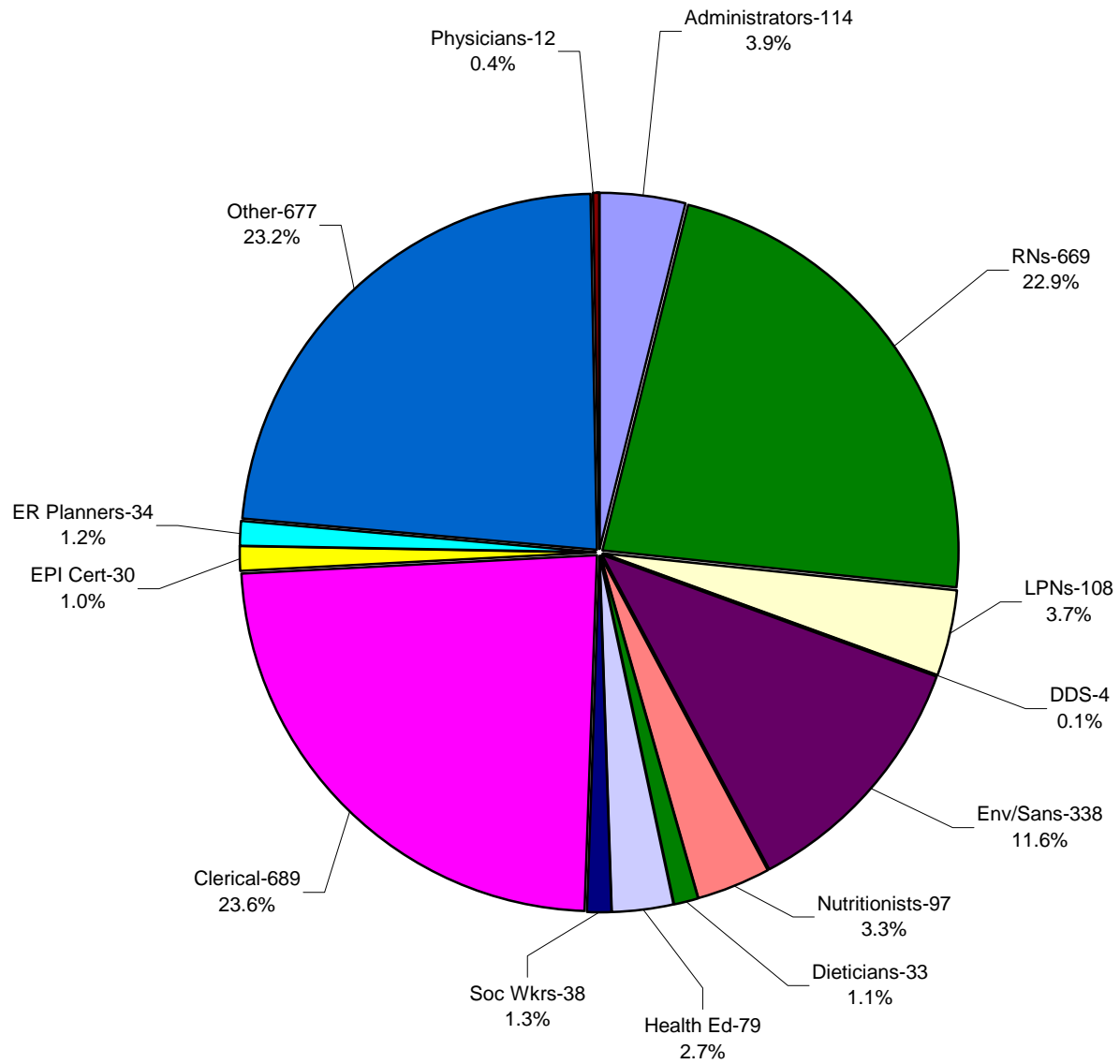
Ten (10) local public health agencies have a total of 12 physicians on staff. Only 3 of the 12 physicians works full time. An additional 120 physicians are available as consultants for local public health agencies. Thirty-eight percent (38%) work as volunteers.

Only 4 dentists are paid employees of local public health agencies, 3 of which work full time. An additional 17 dentists provide services for local public health agencies primarily (65%) as volunteers (See Graph 7.17.1 & 7.17.2.3 and Data Tables 7.17.1 thru 7.17.2.3)

OTHER LOCAL PUBLIC HEALTH AGENCY STAFF

Nearly half (46%) of local agencies employ staff in positions other than those described above. Other staff makes up 23% of local public health agency workforce. Various categories of other staff include animal control officers, homemaker aides, janitorial staff and information technologists. (See Graph 7.18.1 and Data Tables 7.18.1 & 7.18.1.1)

**Total Local Public Health Agencies
Public Health Staff Percentages - 2005**



CHAPTER 2

II. VARIATION IN LOCAL PUBLIC HEALTH AGENCY WORKFORCE BY SIZE OF POPULATION SERVED - 2004

Forty-seven percent (47%) of Missouri's local public health agency workforce is employed in the 13 public health jurisdictions that serve populations greater than 80,000. The remaining 101 agencies employ the rest (53%). The largest agencies are most likely to employ staff in full-time positions. Eight percent (8%) of the largest agencies' staff works part time while 31% of the staff in the smallest agencies is employed part time. Agencies serving populations of 20,000 or fewer have a slightly higher turnover rate, with 15% of their staff hired in the last year. Agencies serving other population sizes hired from 12% to 14% of their staff during the past year. (See Graph 7.1 & 7.2 and Data Table 7.1 & 7.2)

BENEFITS FOR LOCAL PUBLIC HEALTH WORKFORCE

Most agencies (86% of smallest to 100% of largest) contribute to health insurance benefits for staff. However, of agencies serving populations greater than 80,000, 92% also contribute to dental insurance coverage; only 14% of agencies serving populations 20,000 or fewer are able to do so. Ninety-two percent (92%) of the largest agencies contribute toward life insurance for their staff, while only 59% of the smallest agencies do so. Staff retirement programs are supported by 100% of agencies in both groups that serve populations greater than 40,000. Seventy-seven percent (77%) of the smallest agencies contribute toward this benefit, and 83% of agencies that serve populations from 20,001 to 40,000 contribute toward employee retirement. (See Graph 7.3 & 7.4 and Data Tables 7.3 & 7.4)

PROFESSIONAL DEVELOPMENT

Most agencies (86% of the smallest to 100% of both groups that serve populations over 40,000) have staff that participate in computer based training, satellite education programs, and other continuing education. Agencies serving populations from 40,001 to 80,000 are more likely than those in other groups to have staff participating in college courses as a means of professional development; 69% of agencies in this group utilize college courses compared to 41% to 62% of agencies in groups that serve other sizes of population. (See Graph 7.5 and Data Table 7.5)

ADMINISTRATORS

Over half (55%) of administrators in agencies that serve populations 20,000 or fewer are registered nurses. Nurses also fill the role as administrator in 50% of agencies that serve populations from 40,001 to 80,000. No agencies that serve populations greater than 80,000 have nurses as their administrator. (See Data Table 7.6.1)

The percentage of time spent on administrative activities increases in agencies serving larger populations. Twelve of the 13 administrators (92%) in the largest agencies spend all of their time on administration. Eighty-one percent (81%) of administrators in agencies serving populations from 40,001 to 80,000, 59% of administrators in agencies serving populations from 20,001 to 40,000, and only 38% of administrators in agencies serving populations 20,000 or fewer spend all of their time managing people and activities within their organization. (See Graph 7.6.3 and Data Table 7.6.3)

Educational levels of administrators are highest in the largest agencies. Eighty-five percent (85%) of administrators in agencies serving populations over 80,000 have a master's or doctorate degree. The percentage of administrators with a bachelor's degree or above decreases from 100% in agencies serving populations greater than 80,000, and 85% in agencies serving populations from 40,001 to 80,000, down to 36% in agencies serving populations 20,000 or fewer. Twenty-seven percent (27%) of administrators in agencies serving populations 20,000 or fewer, and 21% of administrators in agencies serving populations from 20,001 to 40,000 have high school as their highest graduation level. Fourteen percent (14%) and 10% of administrators in these respective groups are currently working towards a baccalaureate degree. (See Graph 7.6.4 and Data Table 7.6.4& 7.6.6)

Over half (52% to 66%) of administrators in each of the three groups of agencies serving populations less than 80,000 have been in their position 6 years or more. Conversely, administrators in the largest agencies were hired more recently; 69% have spent 5 years or less in their position. (See Graph 7.6.5 and Data Table 7.6.5)

Annual salary earned by an administrator increases with the size of population served by the agency. A majority (77%) of administrators in agencies serving populations greater than 80,000, earn an annual salary of \$75,000 or more. In agencies that serve populations from 40,001 to 80,000, the majority of administrators (63%) earn from \$55,000 to \$74,999. More administrators (48%) in agencies serving populations from 20,001 to 40,000 and 50% in agencies that serve populations of 20,000 or fewer earn between \$40,000 and \$54,999. (See Graph 7.6.7 and Data Table 7.6.7).

NURSES

Registered nurses (RNs) make up from 26% to 31% of the total staff in agencies within the 3 groups that serve smaller sizes of population, but in agencies that serve populations greater than 80,000, RNs represent only 16% of their workforce. Eight (8) of the 12 nurse practitioners working in local public health agencies work in agencies that serve populations of 20,000 or fewer. Four (4) of the 12 also fill the role as agency administrator. The largest agencies are more likely to employ RNs with a bachelor's or master's degree in nursing; 48% of their RNs have such degrees. The percentage of all RNs with bachelor's or master's degrees working in agencies serving other population sizes ranges from 23% to 27%. However, 19% of RNs working in agencies serving populations of 20,000 or fewer are currently working towards a higher degree. Only 3% to 5% of nurses in agencies serving other sizes of population are doing so. (See Graphs 7.7.1 thru 7.7.3 and Data Tables 7.7.1 thru 7.7.3)

There are 25 RNs that are certified by American Nurses Credential Center (ANCC) as Community Health Nurses currently working in local public health agencies. Ten (10) of the 25 work in agencies serving populations of 20,000 or fewer. The rest are evenly distributed between agencies that serve populations between 20,001 and 40,000 and those serving populations greater than 80,000. No certified nurses work in agencies serving populations between 40,001 and 80,000. (See Graph 7.7.3 thru 7.7.6 and Data Table 7.7.4)

In agencies serving populations greater than 80,000, 18% of RNs without a bachelor's or master's degree have completed a baccalaureate course in principles of community/public health nursing; only 5% of RNs without a degree in the smallest agencies have done so. Eleven percent (11%) of RNs without a degree in the other groups of agencies have completed the course. A

larger percentage (71% to 73%) of RNs working in the 2 groups of agencies that serve smaller sizes of population reportedly are practicing population-based public health nursing. Sixty-two percent (62%) to 67% of RNs working in each of the groups of agencies serving larger populations report that they practice population-based public health nursing. (See Graphs 7.7.3 thru 7.7.6 and Data Tables 7.7.5 & 7.7.6)

Forty-six percent (46%) of agencies that serve populations greater than 80,000 pay their full-time registered nurses an average annual salary of \$40,000 or more; only 4% of agencies that serve populations of 20,000 or fewer pay nurses in this range. The largest percentage (54% to 74%) of agencies in all groups pay nurses an average annual salary in the range between \$30,000 and \$39,999. No agency in the group serving the largest population size pays nurses an average annual salary less than \$30,000. However, 19% to 31% of agencies in the groups serving smaller population sizes pay nurses an average annual salary in the lowest range between \$20,000 and \$29,999. (See Graph 7.7.7 and Data Table 7.7.7)

Sixty percent (60%) of agencies that serve populations greater than 80,000 pay Licensed Practical Nurses (LPNs) an annual average salary within the range between \$30,000 and \$39,999, however, the majority of agencies (86% or more) in other groups pay LPNs in a lower range between \$20,000 and \$29,999. LPNs represent 8% of the workforce in the smallest agencies, but only 1% of the workforce in the largest agencies. (See Graphs & 7.8.2 and Data Tables 7.8.1.1 & 7.8.2)

ENVIRONMENTAL SPECIALISTS

More agencies (60%) serving populations of 20,000 or fewer employ environmental specialists part time; in agencies serving populations greater than 80,000, only 3% of environmental specialists work part time. Fifty-three percent (53%) of agencies that serve populations of 20,000 or fewer pay environmental specialists an average annual salary in the range between \$20,000 and \$29,999. The majority of agencies (68% to 91%) in all other groups pay environmental specialists an average annual salary above \$30,000, and 33% of the largest agencies pay in a higher range from \$40,000 to \$54,999. (See Graphs 7.9.1 & 7.9.3 and Data Tables 7.9.1 & 7.9.3)

Approximately (40%) of environmental specialists working in the 2 groups of agencies that serve population sizes between 20,001 and 80,000 are state certified; only 12% of those working in the largest agencies are certified. Nationally registered environmental specialists are evenly distributed among the 4 groups of agencies; in each group 4% to 5% are nationally certified. (See Graph 7.9.4 and Data Tables 7.9.4.1 & 7.9.4.2)

NUTRITIONISTS

Agencies serving populations of 20,000 or fewer are most likely to hire nutritionists as part-time staff. Seventy-nine percent (79%) of nutritionists in agencies serving populations of 20,000 or fewer work part time compared to approximately 12% in each of the 2 groups of agencies serving populations greater than 40,000. The majority (67%) of full time nutritionists working in the smallest agencies earn an average annual salary in the range from \$20,000 to \$29,999. Eighty percent (80%) of full-time nutritionists in the largest agencies and 50% of those working in agencies that serve populations from 40,001 to 80,000 earn an annual salary in a higher range of \$30,000 or more. (See Graphs 7.10.1. & 7.10.3 and Data Tables 7.10.1.1 & 7.10.3)

DIETICIANS

Eighty percent (80%) of dietitians working in the largest agencies work in full-time positions. Only half (50%) of those working in agencies serving populations of 20,000 or fewer, and 63% of those working in agencies that serve populations between 20,001 and 40,000 work full time. All dietitians in agencies that serve populations between 40,001 and 80,000 have a bachelor's degree, and all are registered dietitians. In groups of agencies that serve other sizes of population, 10% to 13% of dietitians have an associate degree as their highest education attained, and 13% to 40% have master's degrees. Twenty-five percent (25%) of dietitians in the smallest agencies are registered, 75% of those in agencies that serve populations between 20,001 and 40,000, and 80% of those in agencies that serve populations over 80,000 are also registered dietitians. The majority (60% to 75%) of agencies in each group pay dietitians an average annual salary in the range between \$30,000 and \$39,999. (See Graphs 7.11.1.1 thru 7.11.3 and Data Tables 7.11.1.1 thru 7.11.4)

HEALTH EDUCATORS

Sixty-two percent (62%) of the largest agencies have health educators; however, only 30% of agencies that serve populations of 20,000 or fewer have a health educator on staff. Eighty-five percent (85%) of health educators in the largest agencies work full time, compared to the smallest agencies where only 43% are full time. Over half (53%) of health educators in the largest agencies have a master's degree or above; only 5% to 10% of health educators working in agencies serving other sizes of population have attained this educational level. Over half (57%) of the largest agencies pay full-time health educators an average annual salary over \$40,000. The majority (60% to 83%) of agencies in groups serving other sizes of population pay health educators in the lowest range between \$20,000 and \$29,999. Half (50%) of the 10 health educators that are Certified Health Education Specialists work in the largest agencies. (See Graphs 7.12.1 thru 7.12.4 and Data Tables 7.12.1 thru 7.12.4)

SOCIAL WORKERS

Over half (54%) of agencies that serve populations greater than 80,000 hire social workers, but only 7% of the smallest agencies have them. Fifty-two percent (52%) to 67% of social workers in the 3 groups of agencies that serve populations over 20,001 are licensed, while 20% in the smallest agencies are. (See Graphs 7.13.1 thru 7.13.4 and Data Tables 7.13.1 thru 7.13.4)

SUPPORT STAFF

Support staff account for 31% of total workforce in agencies that serve populations between 40,001 and 80,000. Only 19% of workforce in the largest agencies is comprised of support staff. As with most other categories of staff, more agencies that serve populations greater than 80,000 pay support staff an average annual salary in a higher range. Seventy-seven percent (77%) of the largest agencies pay in the range between \$20,000 and \$29,999 and 15% of them pay over \$30,000. Between 31% and 46% of agencies in the other 3 groups of agencies pay support staff in the lowest range below \$20,000 (See Graph 7.14.1. & 7.14.3 and Data Table 7.14.1.1 & 7.14.3)

EPIDEMIOLOGY SPECIALISTS

Ninety-two percent (92%) of the largest agencies have epidemiology specialists on staff, but only 5% of the smallest agencies employ them. Fifty-five percent (55%) of epidemiology

specialists working in the largest agencies, and seventy-five percent (75%) of those working in agencies that serve populations between 40,001 and 80,000 have a master's degree or above. In the smallest agencies, none have a master's degree, and only 33% have a bachelor's degree. (See Graphs 7.15.2 and Data Tables 7.15.1 & 7.15.2)

EMERGENCY RESPONSE PLANNERS

Each of the 13 largest agencies has an emergency response planner on staff; only 7% of the smallest agencies employ planners. In the 2 groups of agencies that serve populations over 40,001, each of the planners works full time and each of them has a bachelor's degree or above. In the 2 groups of agencies that serve populations up to 40,000, 25% to 43% of planners work part time, and 28% to 50% have completed an educational level lower than a bachelor's degree. (See Graphs 7.16.1 & 7.16.2 and Data Tables 7.16.1 & 7.16.2)

PHYSICIANS

Only three full time physicians are employed in local public health agencies. Each of them works in an agency serving populations greater than 80,000. Nine part-time physicians are employed and are evenly distributed among the other sizes of agencies. Agencies serving populations over 20,000 are more likely (61% to 83%) have physicians on retainer. However, a majority (55%) of the smallest agencies rely on volunteer physicians. (See Graph 7.17.1 & 7.17.1.3 and Data Table 7.17.1.1 & 7.17.1.3)

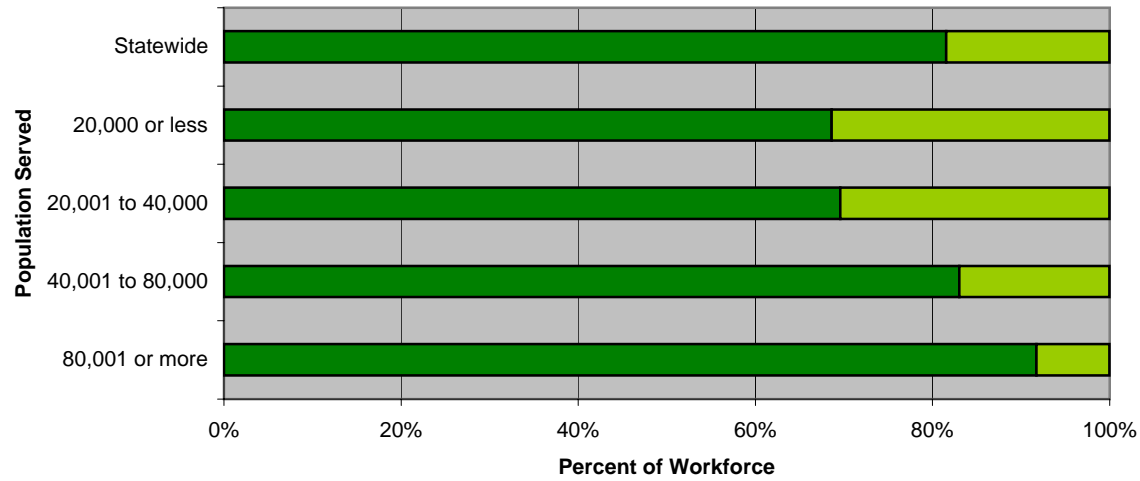
DENTISTS

Only 4 agencies employ dentists to work in public health. Two full-time dentists work in agencies that serve populations greater than 80,000. One full time dentist works in an agency that serves a population between 40,001 and 80,000, and 1 part-time dentist works in an agency that serves a population between 20,001 and 40,000. The largest agencies have an additional 6 dentists on retainer. The smallest agencies, and those that service populations between 40,001 and 80,000 rely on volunteer dentists (See Graph 7.17.2.1 & 7.17.2.3 and Data Table 7.17.2.1 & 7.17.2.3)

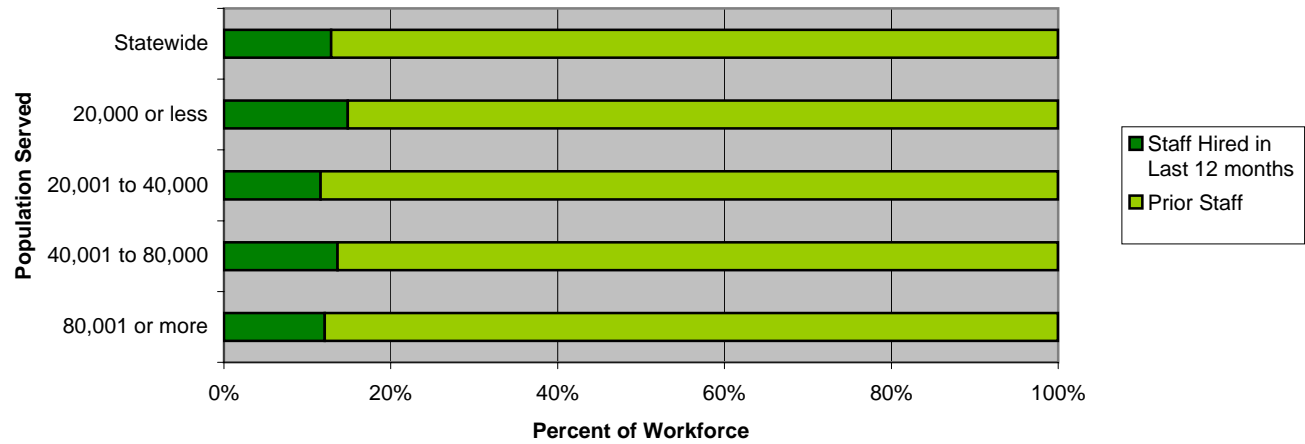
OTHER LOCAL PUBLIC HEALTH AGENCY STAFF

Agencies serving populations greater than 80,000 reportedly have up to 39% of their workforce filling positions other than those described above, compared to agencies serving populations from 40,001 to 80,000 where only 5% of staff fill other kinds of positions. Eighty percent (80%) of the 677 staff reported in the "other" category work in the largest agencies. (See Graph 7.18.1 & Data Table 7.18.1.1)

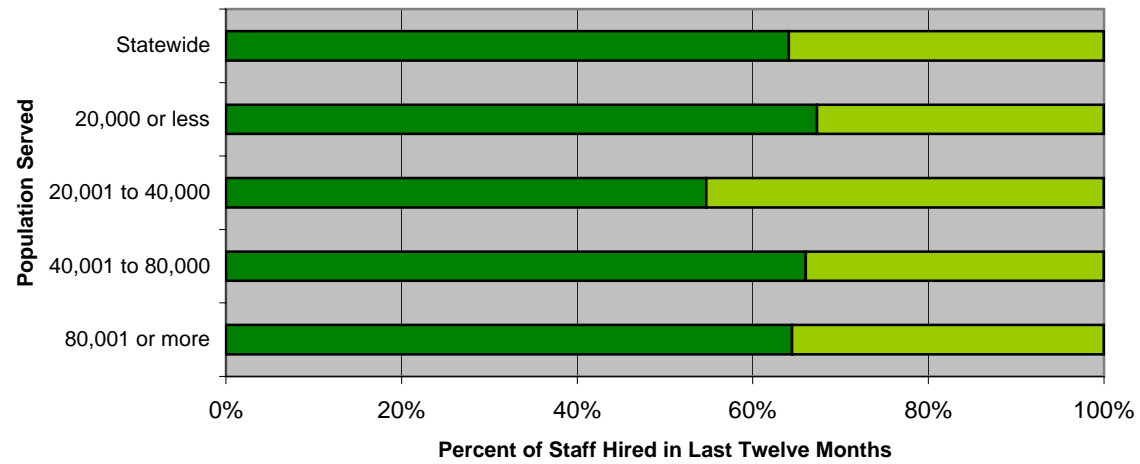
Full and Part-Time Staff - 7.1



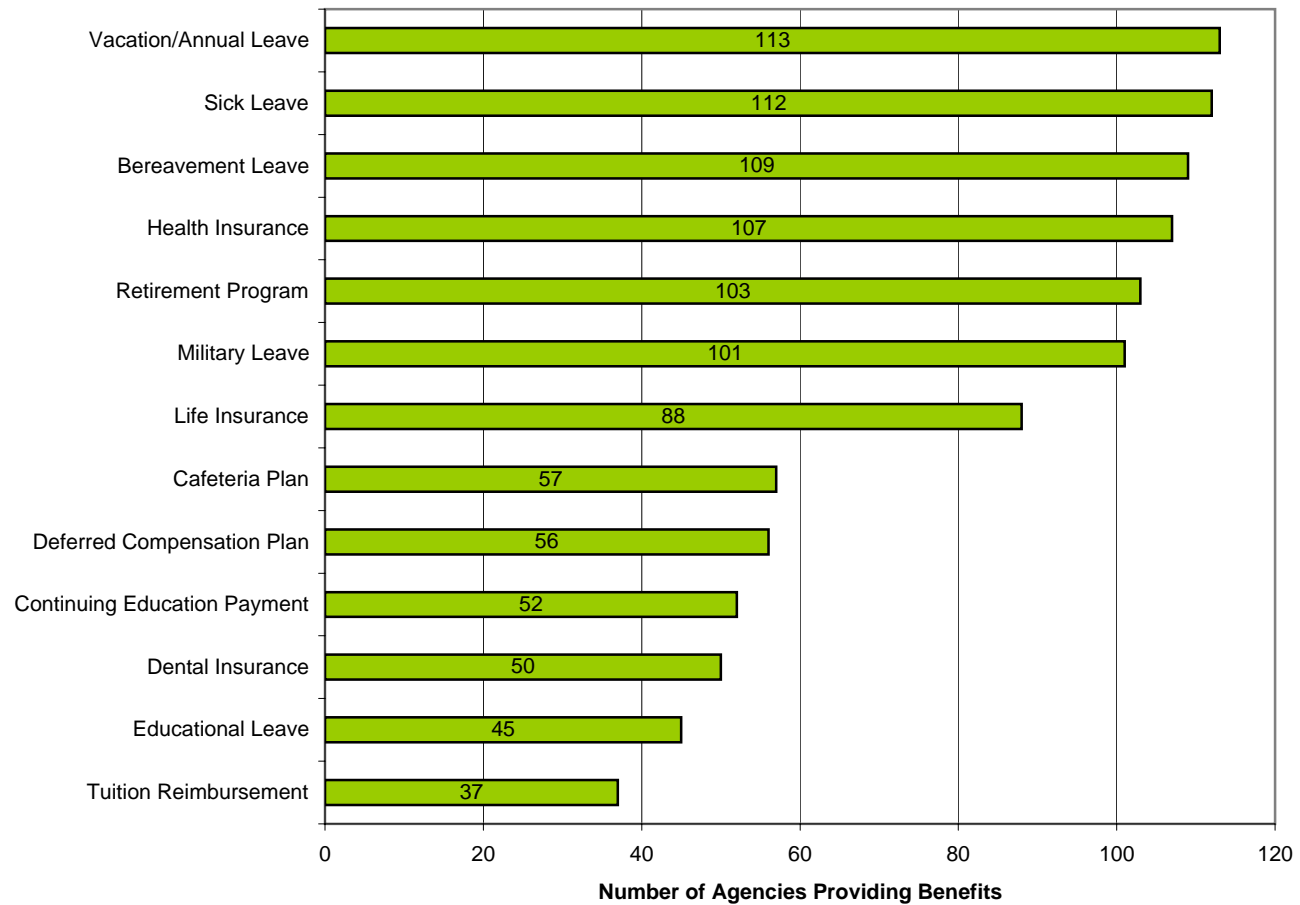
Staff Hired in Last 12 Months - 7.2.



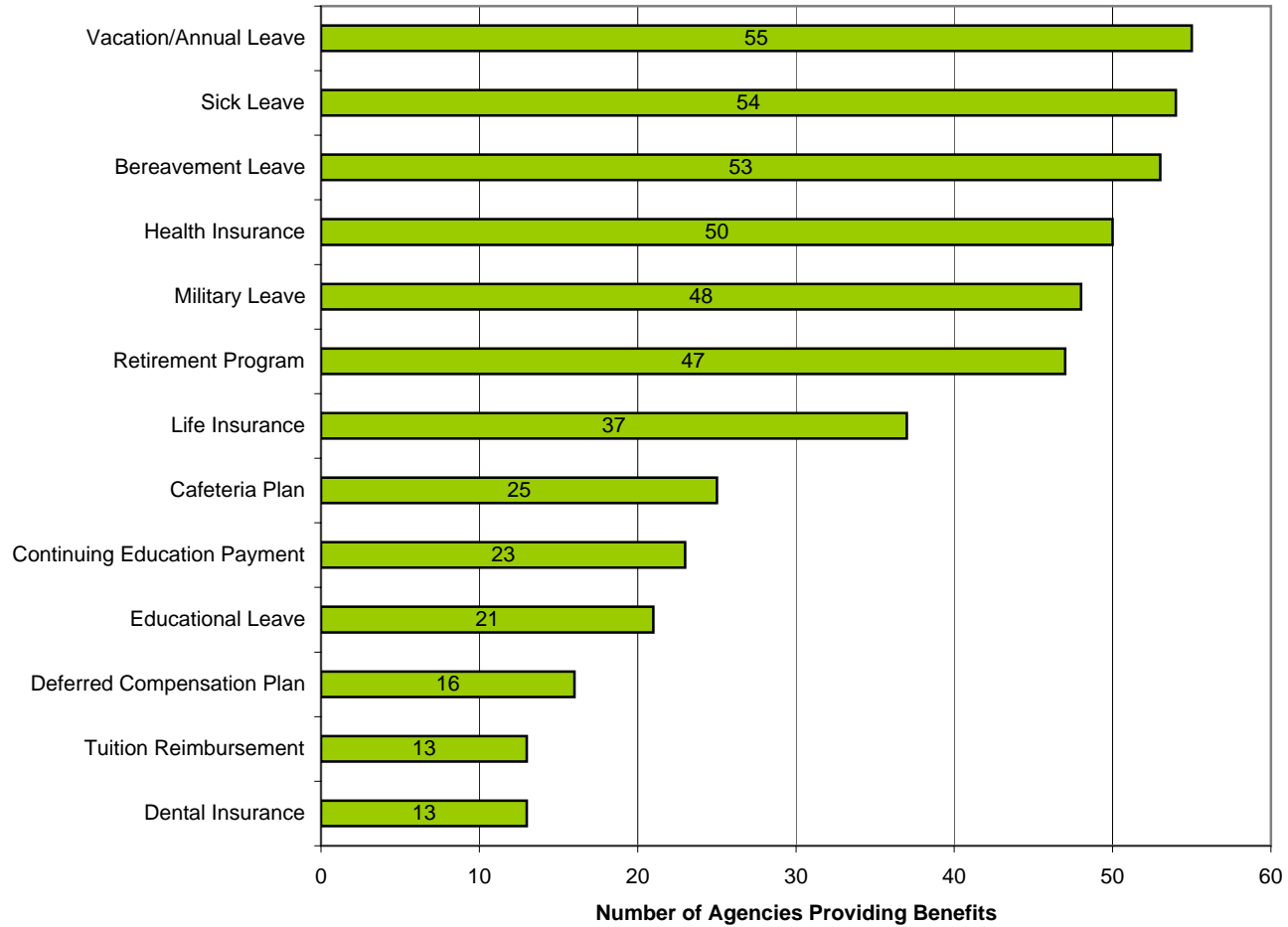
Full and Part-Time Staff Hired in Last Twelve Months - 7.2.1



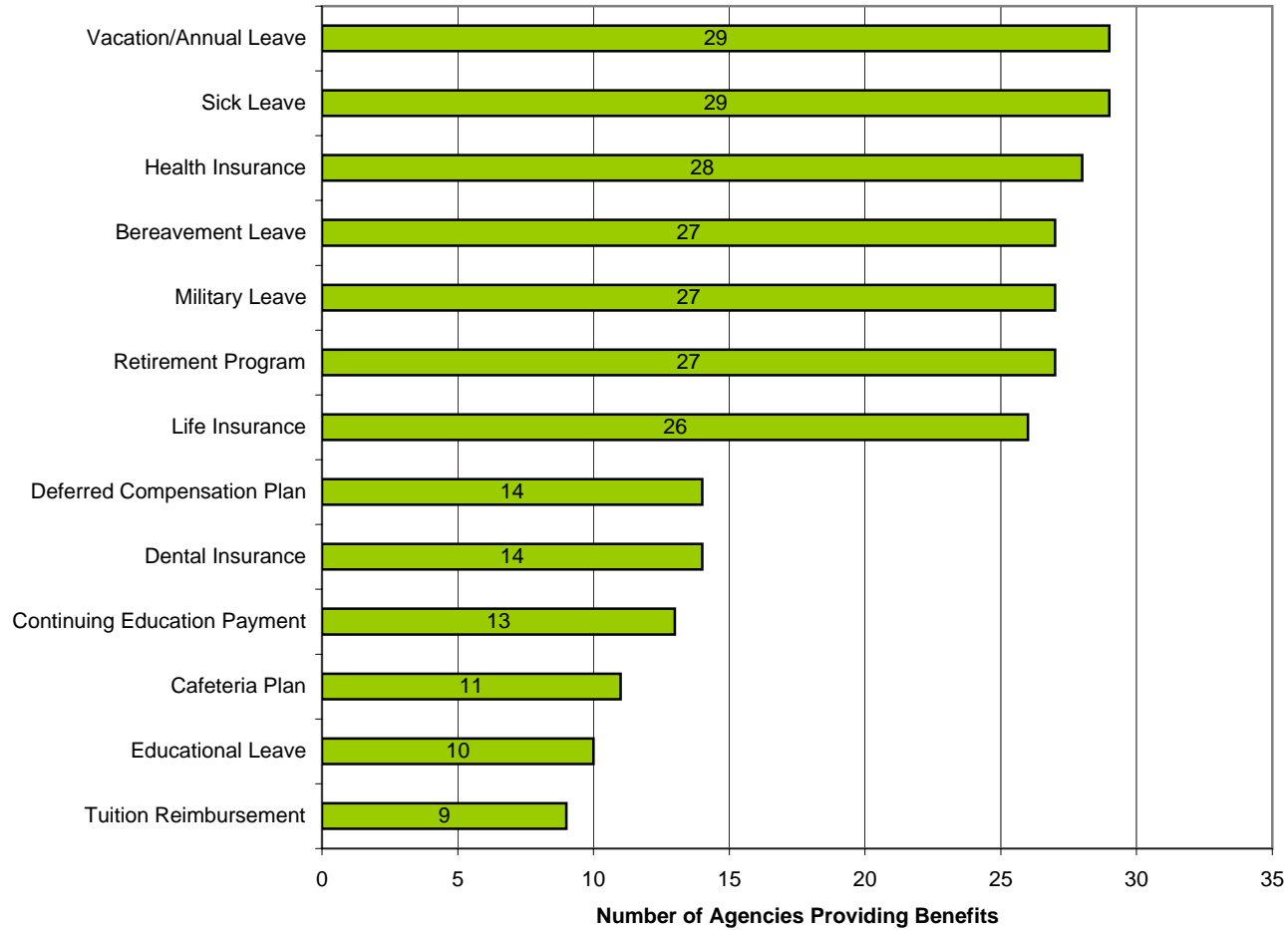
Benefits for Full-Time Employees in Addition to Salary - 7.3
Statewide (114 Agencies)



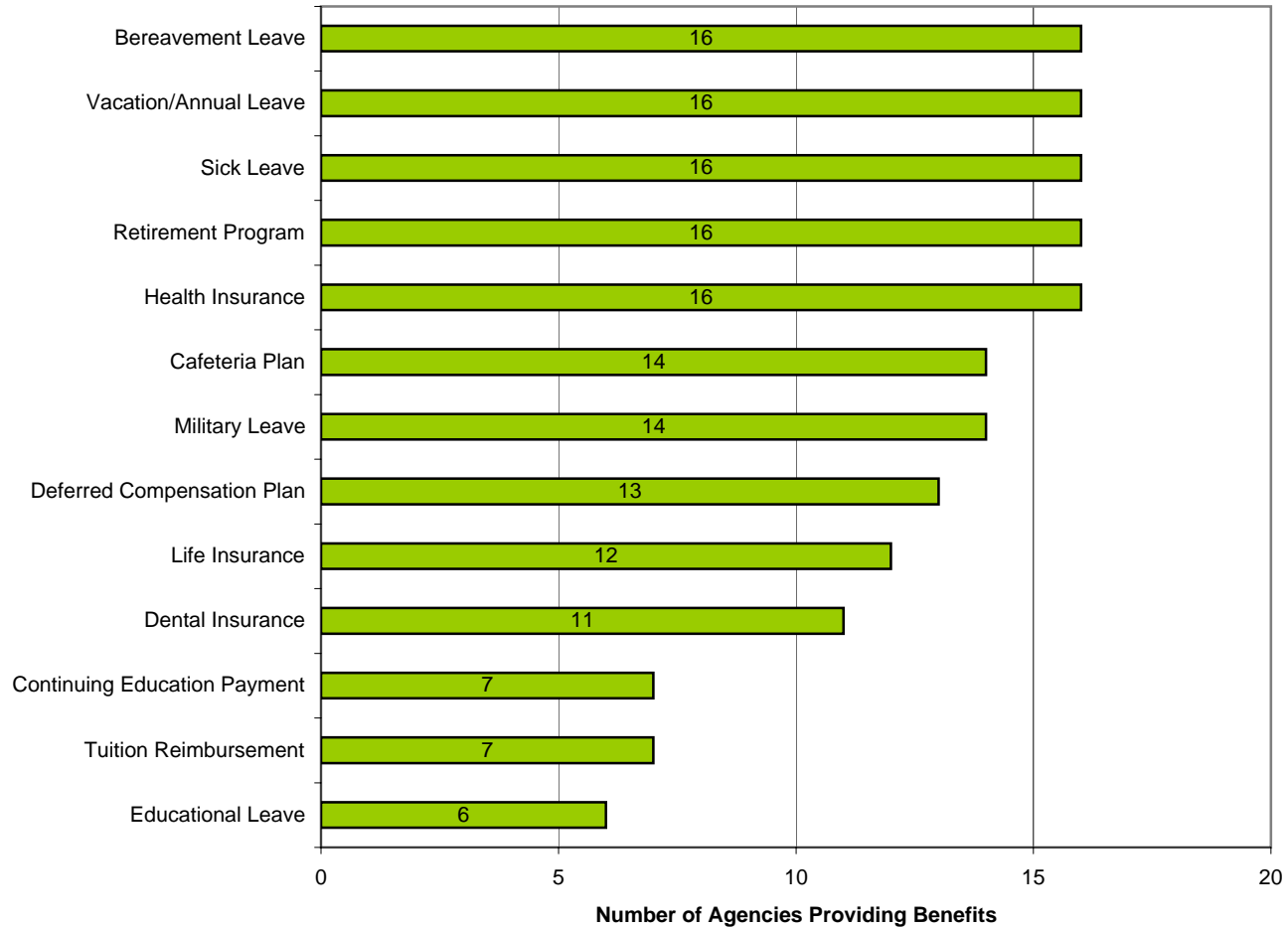
Benefits for Full-Time Employees in Addition to Salary - 7.3
20,000 or less Population (56 Agencies)



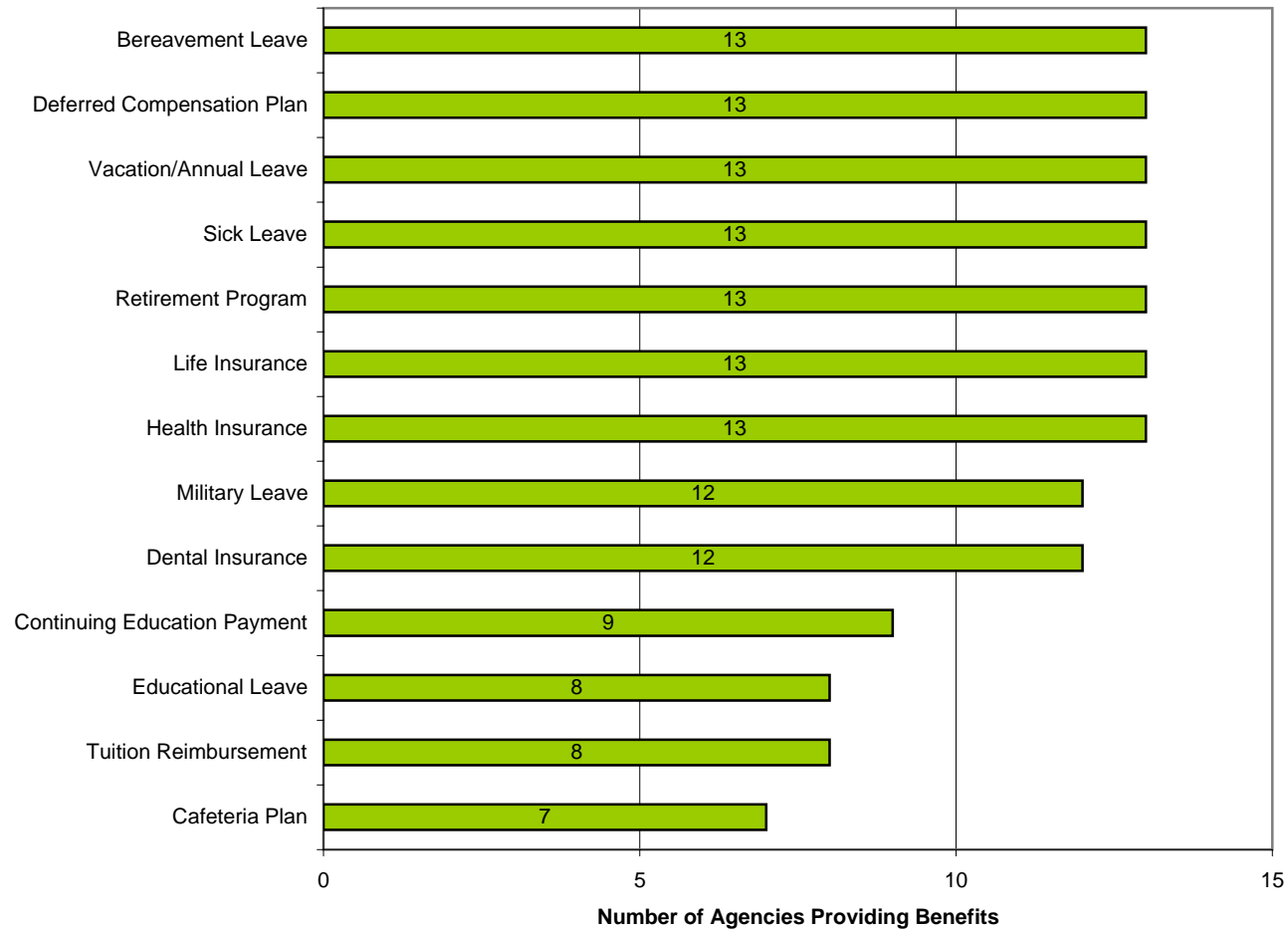
Benefits for Full-Time Employees in Addition to Salary - 7.3
20,001-40,000 Population (29 Agencies)



Benefits for Full-Time Employees in Addition to Salary - 7.3
40,001-80,000 Population (16 Agencies)



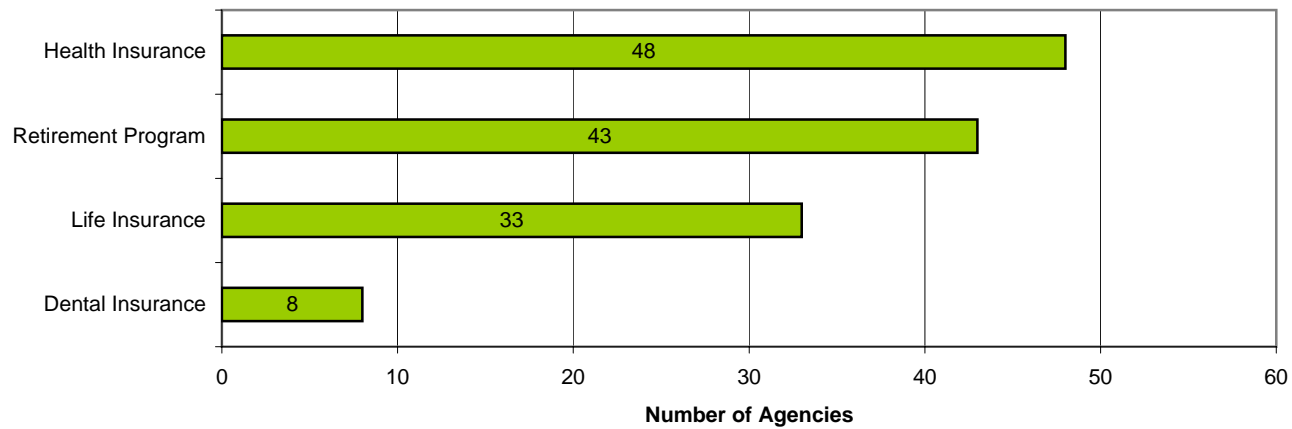
Benefits for Full-Time Employees in Addition to Salary - 7.3
Over 80,001 Population (13 Agencies)



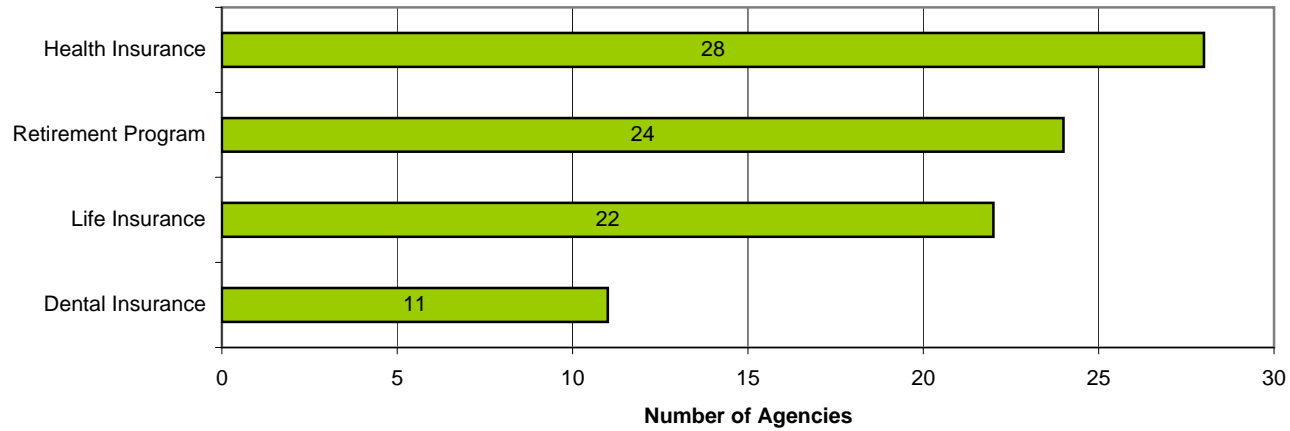
**Agency Contributes to Benefits for Full-Time Employees - 7.4
Statewide (114 Agencies)**



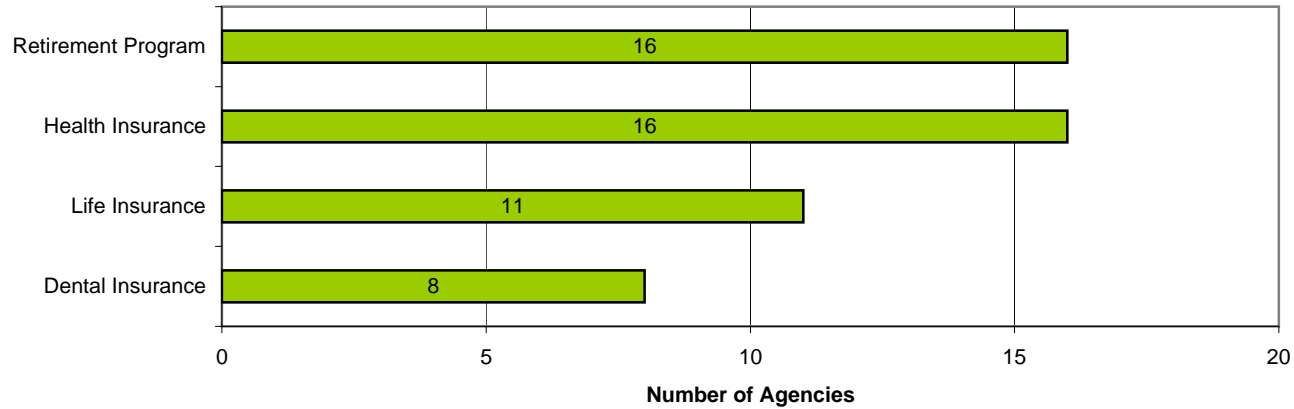
**Agency Contributes to Benefits for Full-Time Employees - 7.4
20,000 or Less Population (56 Agencies)**



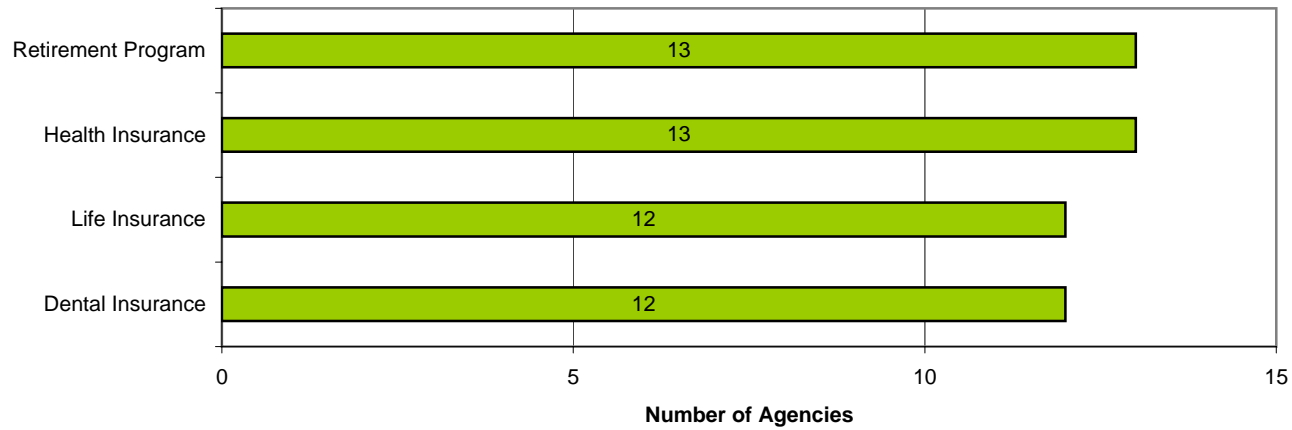
Agency Contributes to Benefits for Full-Time Employees - 7.4
20,001 - 40,000 Population (29 Agencies)



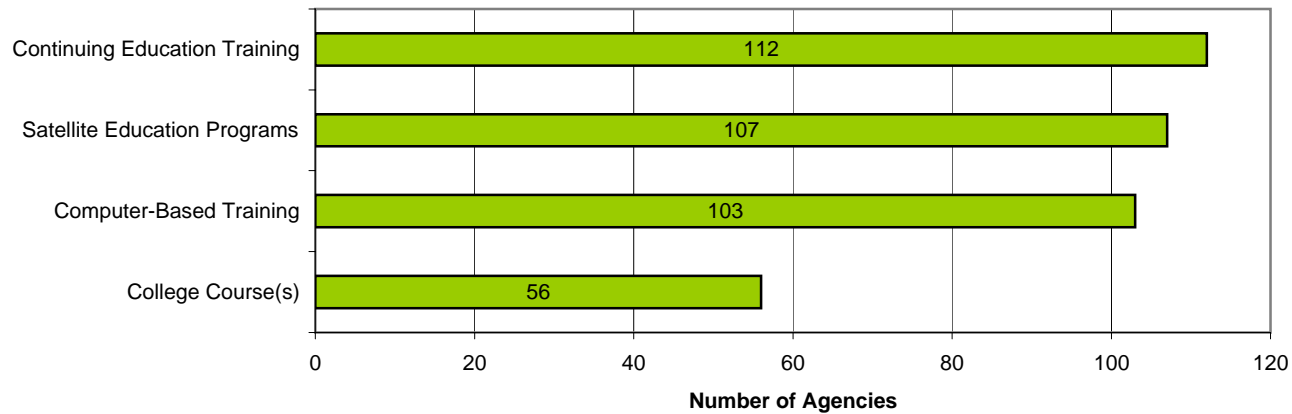
Agency Contributes to Benefits for Full-Time Employees - 7.4
40,001 - 80,000 Population (16 Agencies)



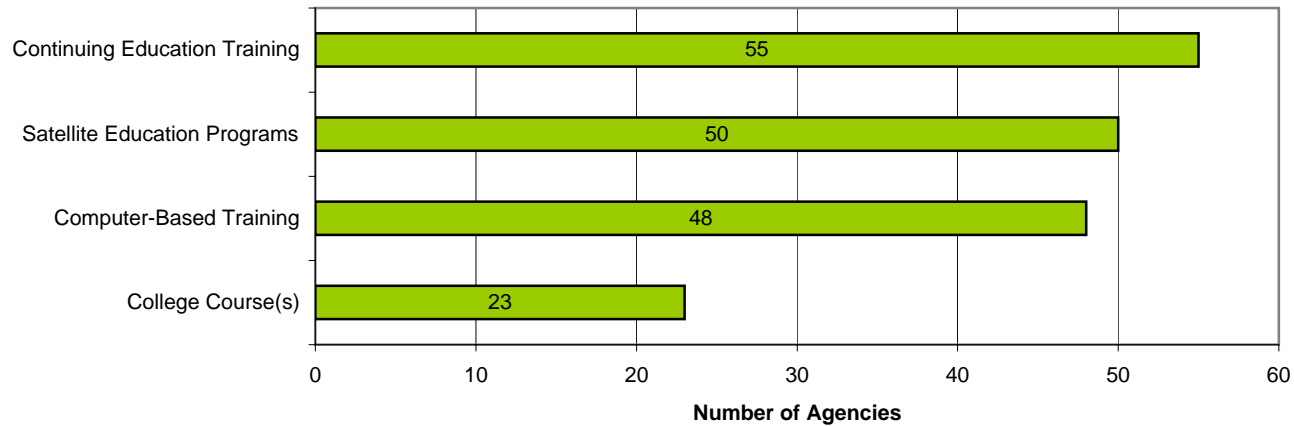
**Agency Contributes to Benefits for Full-Time Employees - 7.4
Over 80,001 Population (13 Agencies)**



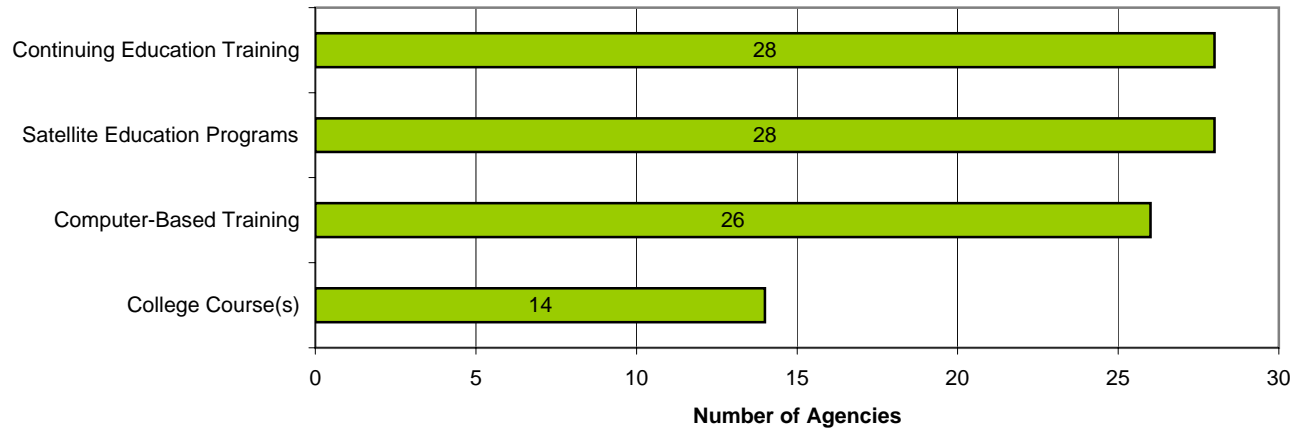
**Full/Part-Time Staff Participate in Professional Development Programs 7.5
Statewide (114 Agencies)**



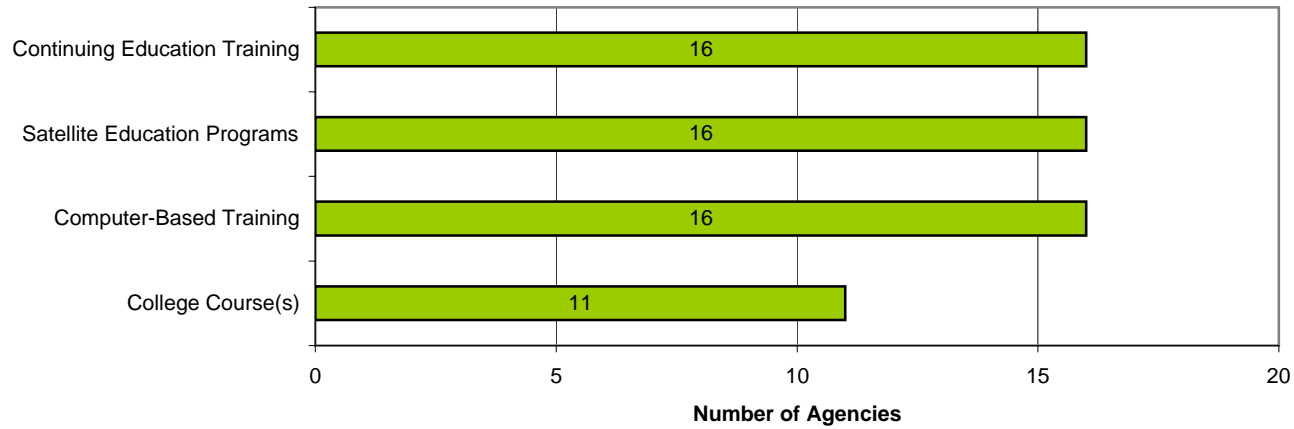
Full/Part-Time Staff Participate in Professional Development Programs 7.5
20,000 or Less Population (56 Agencies)



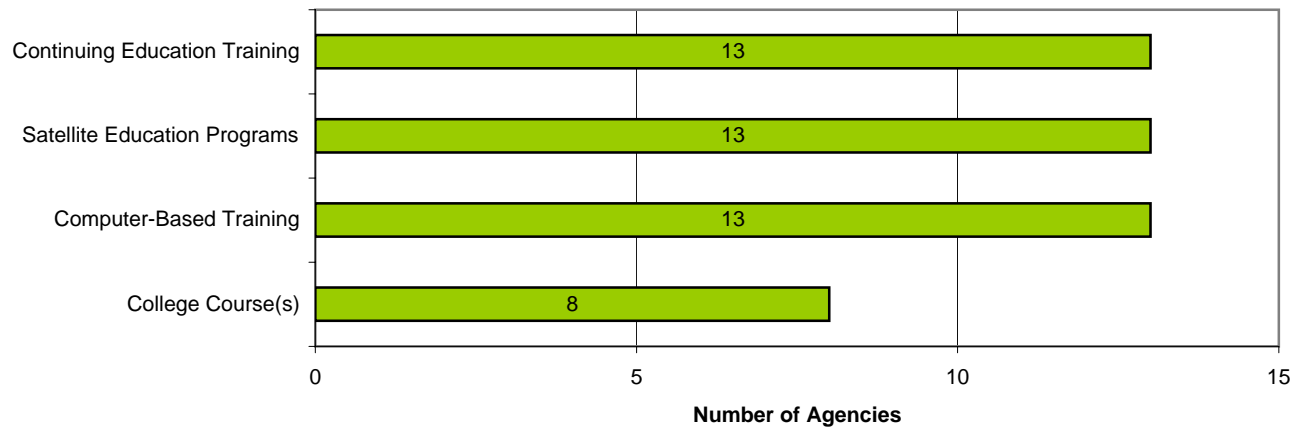
Full/Part-Time Staff Participate in Professional Development Programs 7.5
20,001 - 40,000 Population (29 Agencies)



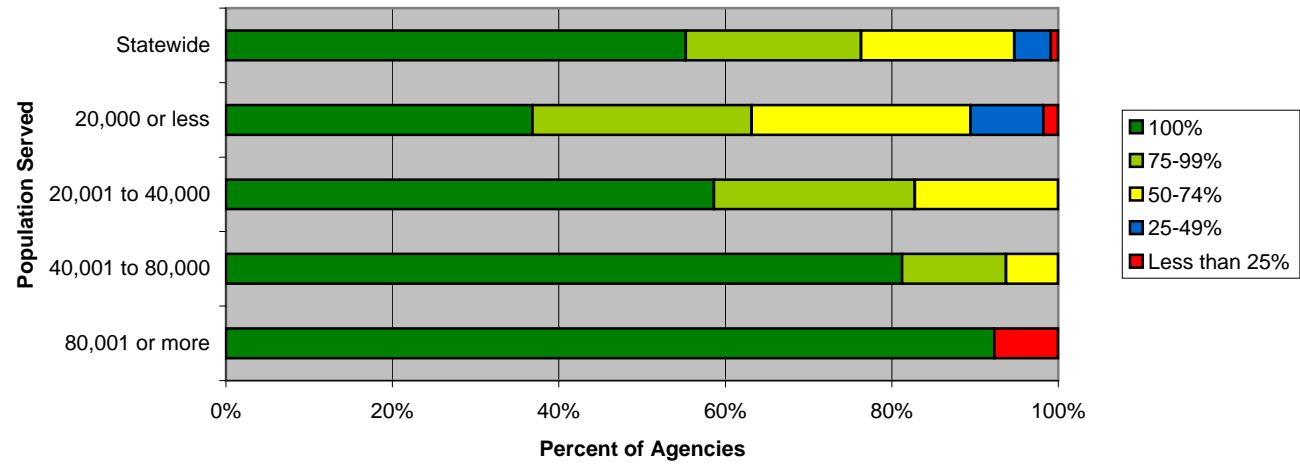
**Full/Part-Time Staff Participate in Professional Development Programs 7.5
40,001 - 80,000 Population (16 Agencies)**



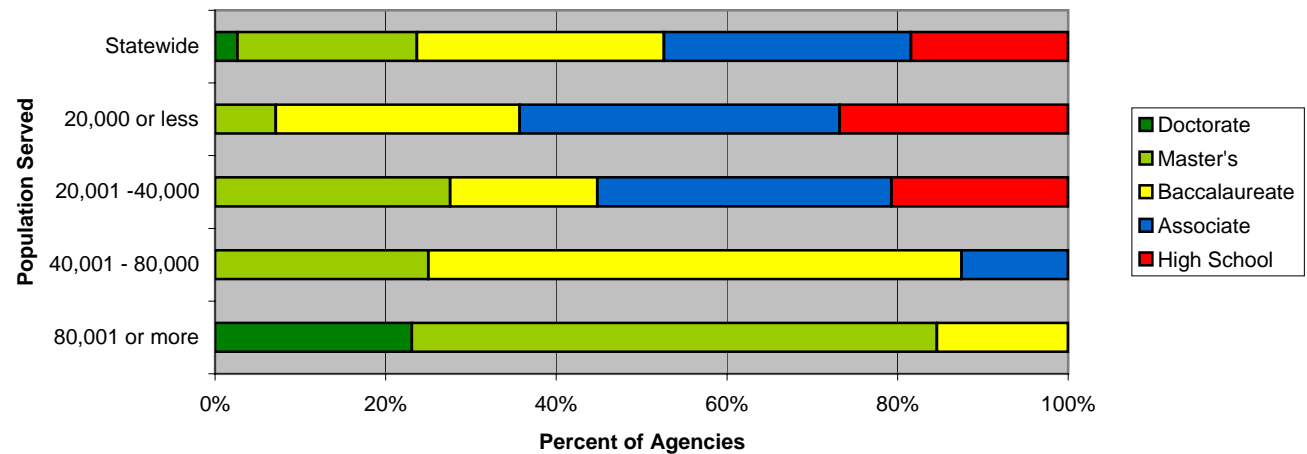
**Full/Part-Time Staff Participate in Professional Development Programs 7.5
Over 80,001 Population (13 Agencies)**



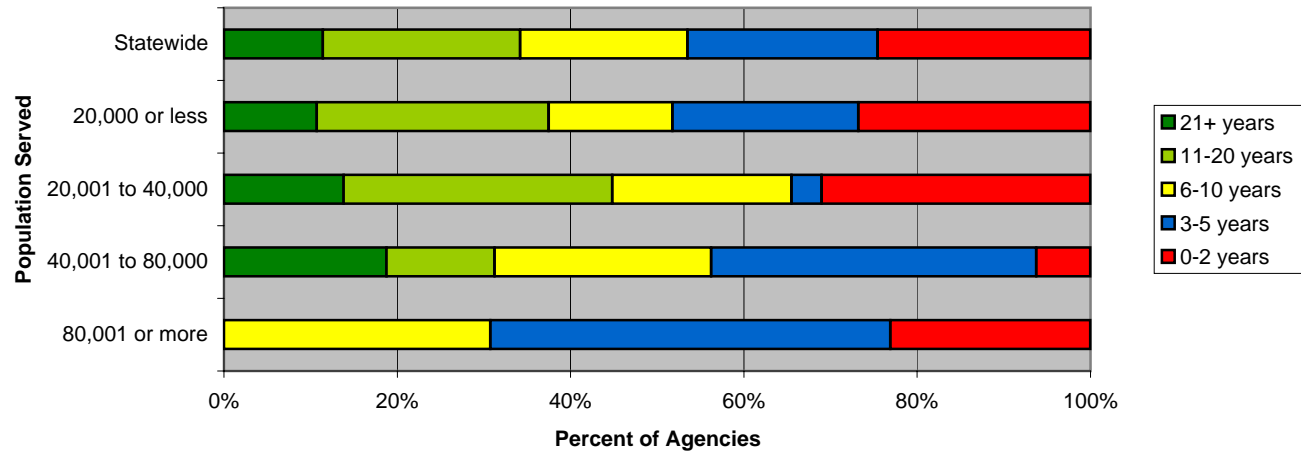
Administrator's Time Devoted to Administrative Duties - 7.6.3



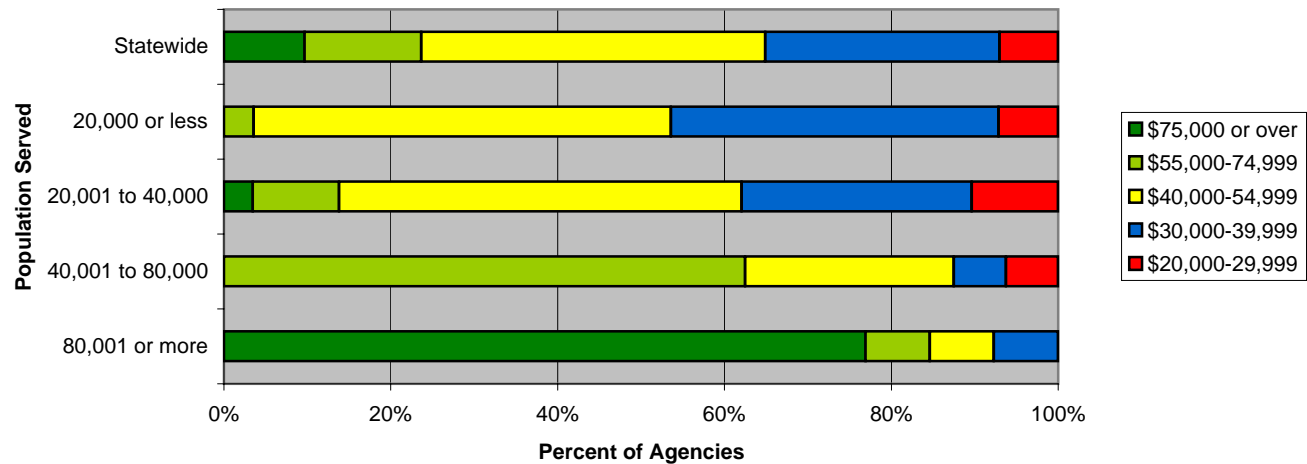
Educational Level of Administrator - 7.6.4



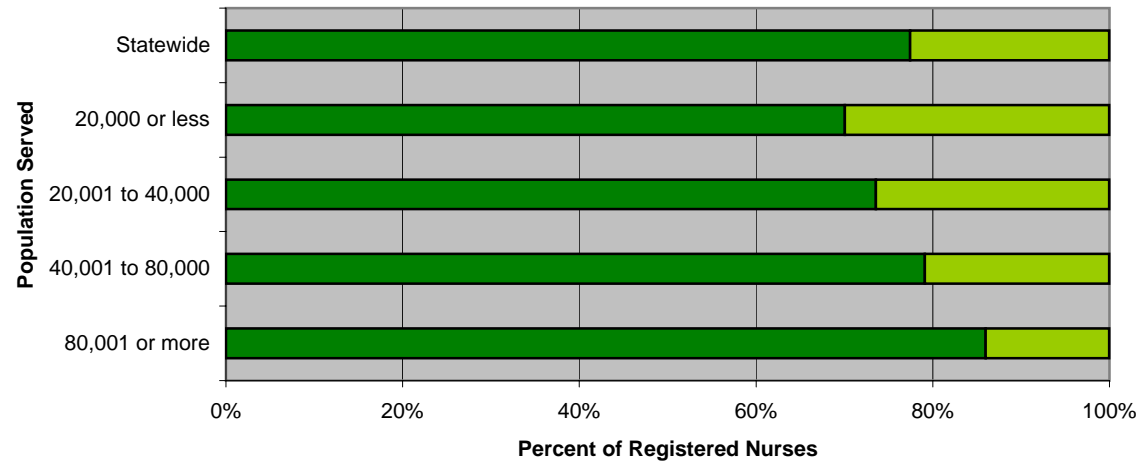
Administrator's Years of Service as Administrator/Director of This Agency - 7.6.5



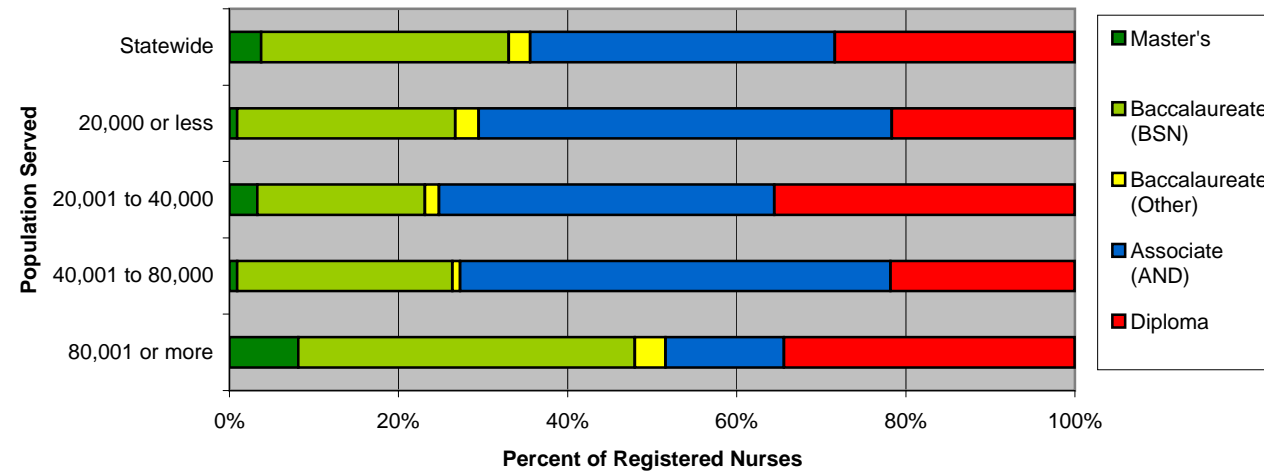
Administrator/Director Salary Level - 7.6.7



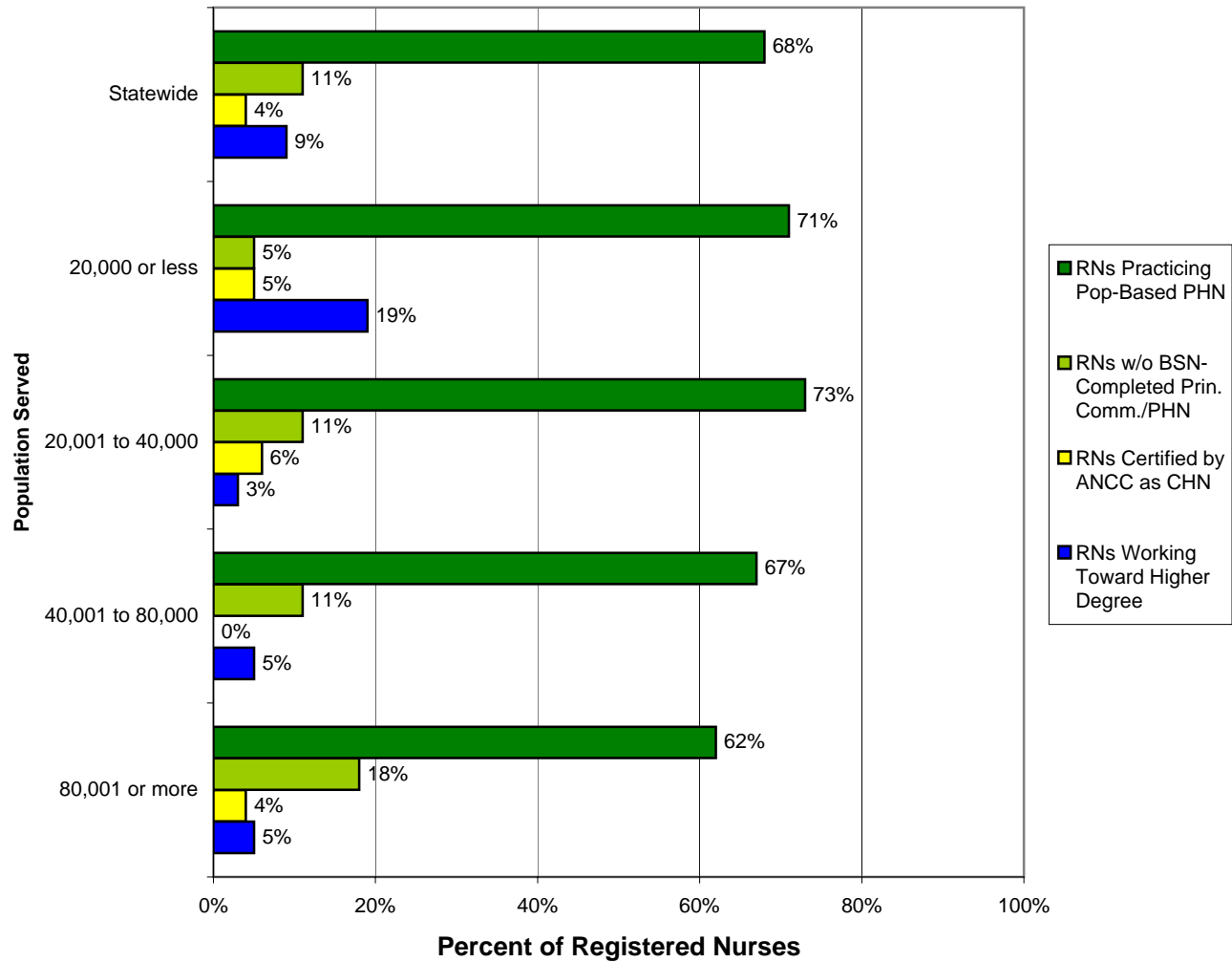
Full and Part Time Registered Nurses - 7.7.1



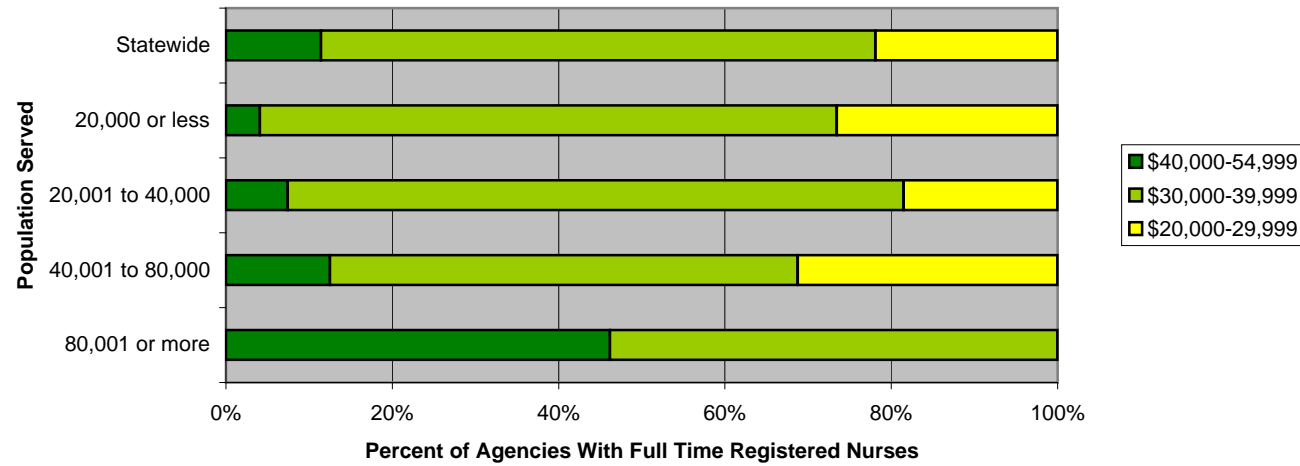
Highest Educational Level of All Registered Nurses - 7.7.2



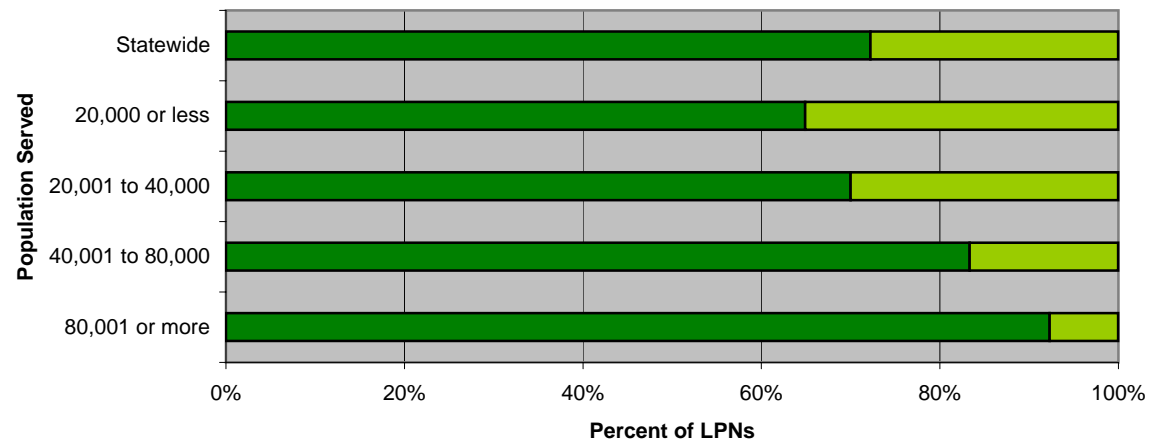
Registered Nurses - 7.7.3 thru 7.7.6

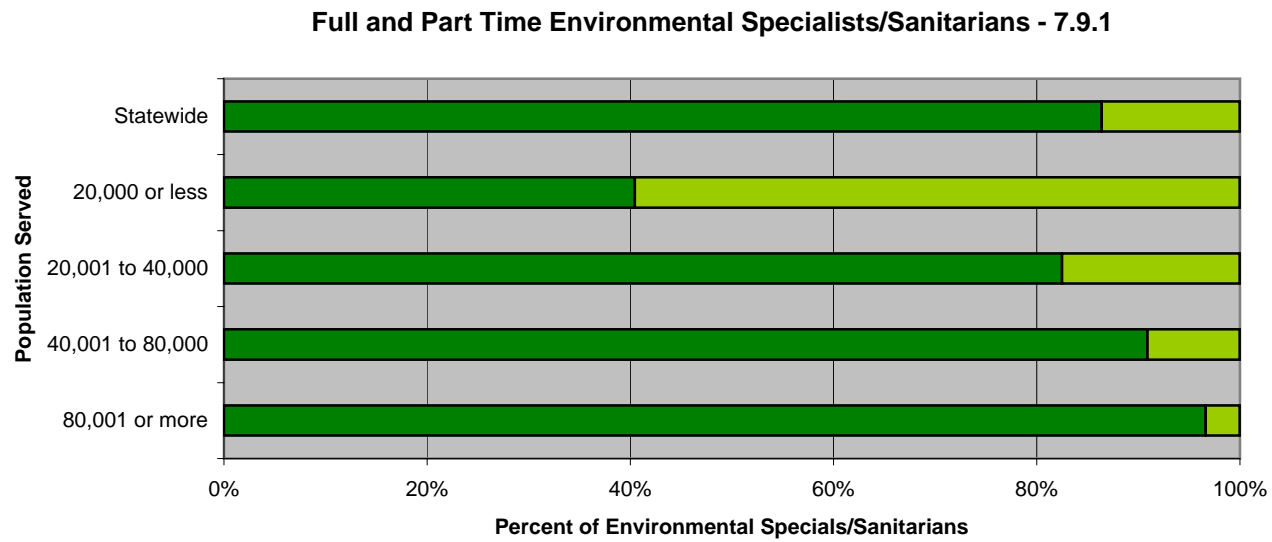
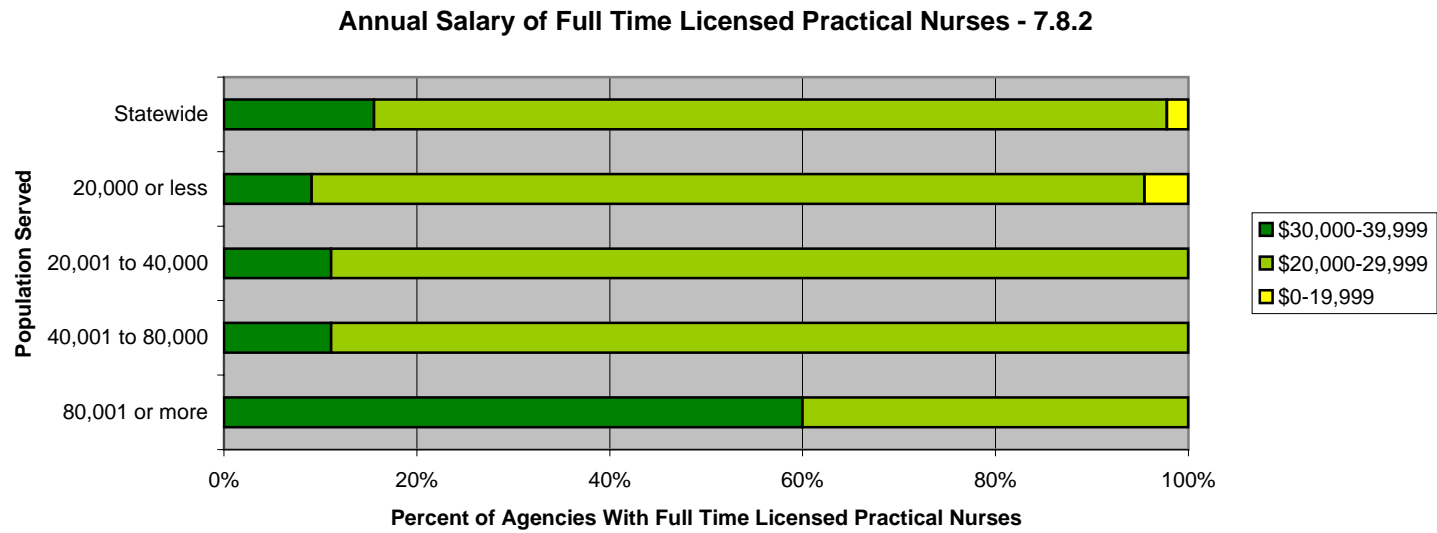


Annual Salary of Full Time Registered Nurses - 7.7.7

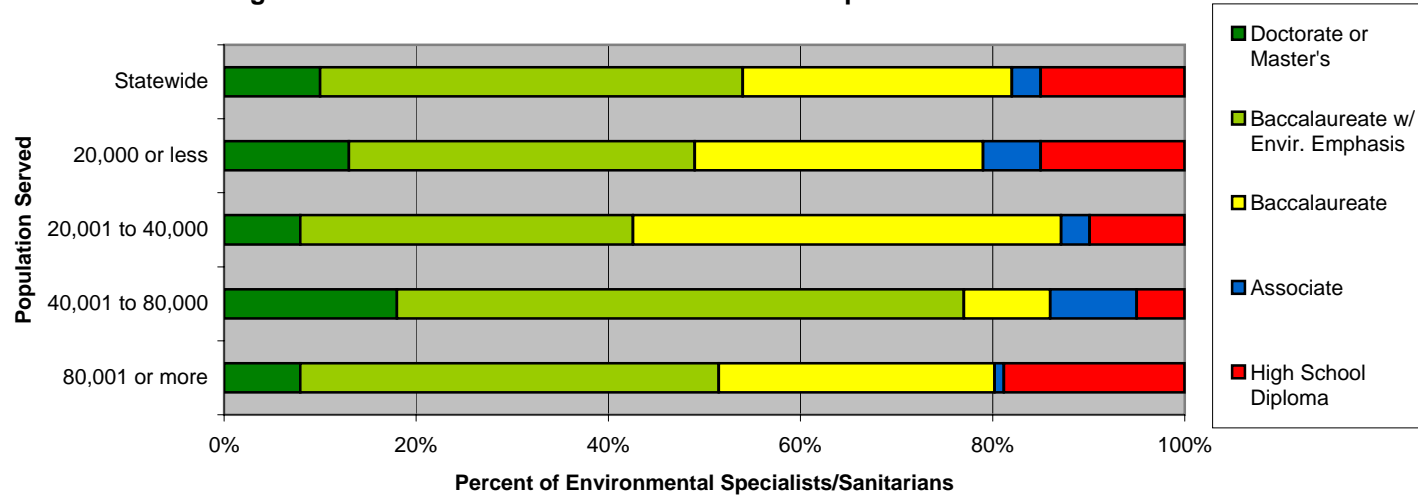


Full and Part Time Licensed Practical Nurses - 7.8.1

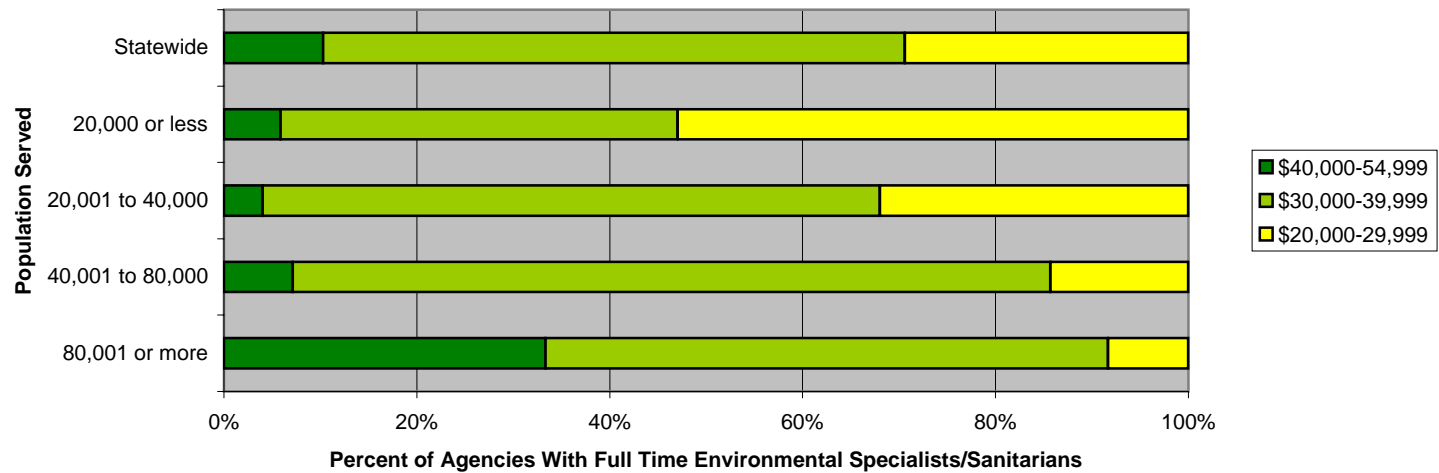




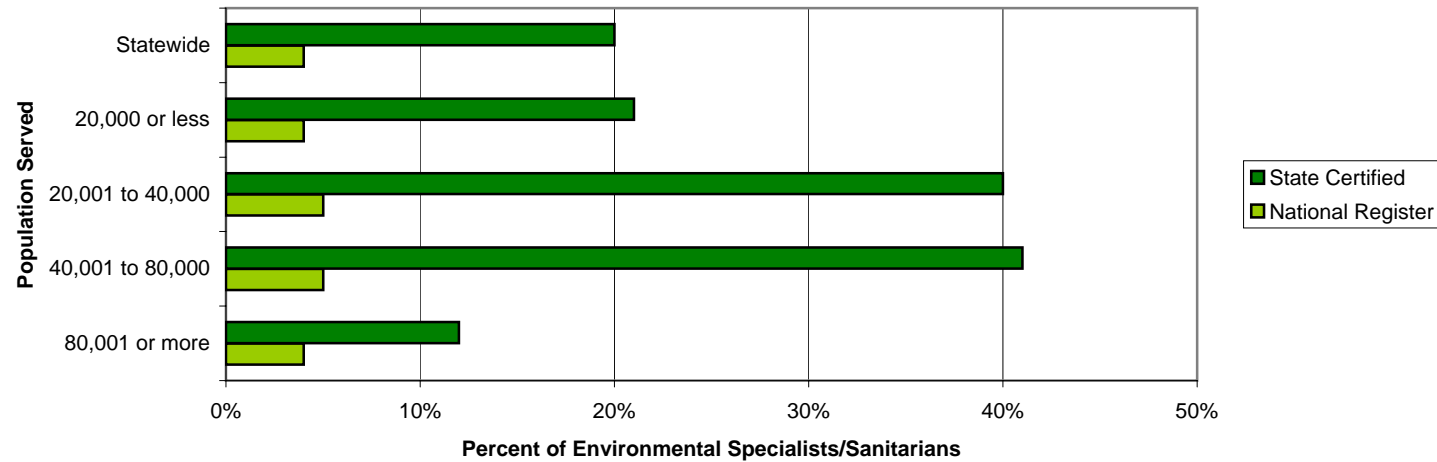
Highest Educational Level of All Environmental Specialists/Sanitarions - 7.9.2



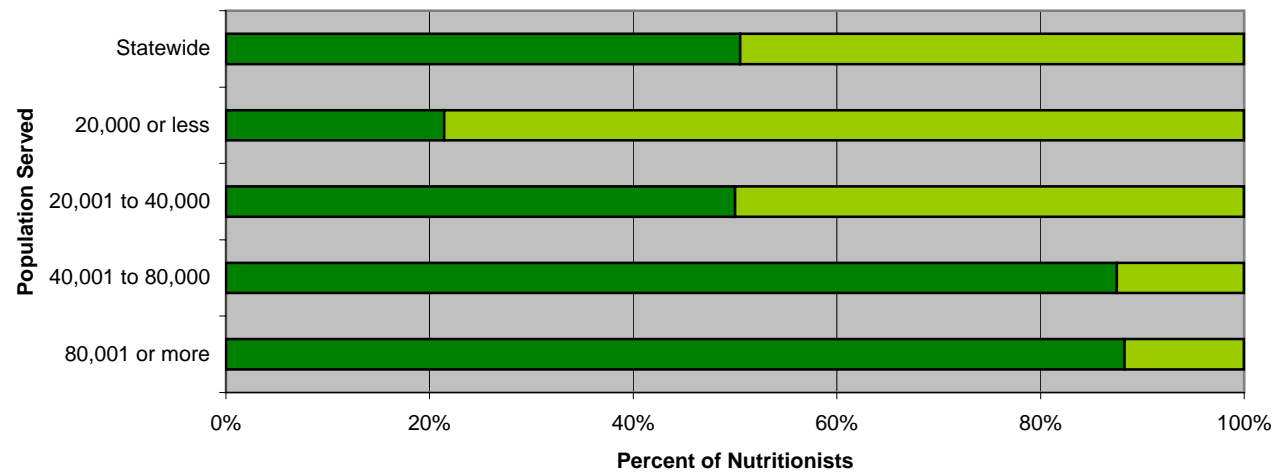
Annual Salary of Full Time Environmental Specialists/Sanitarions - 7.9.3



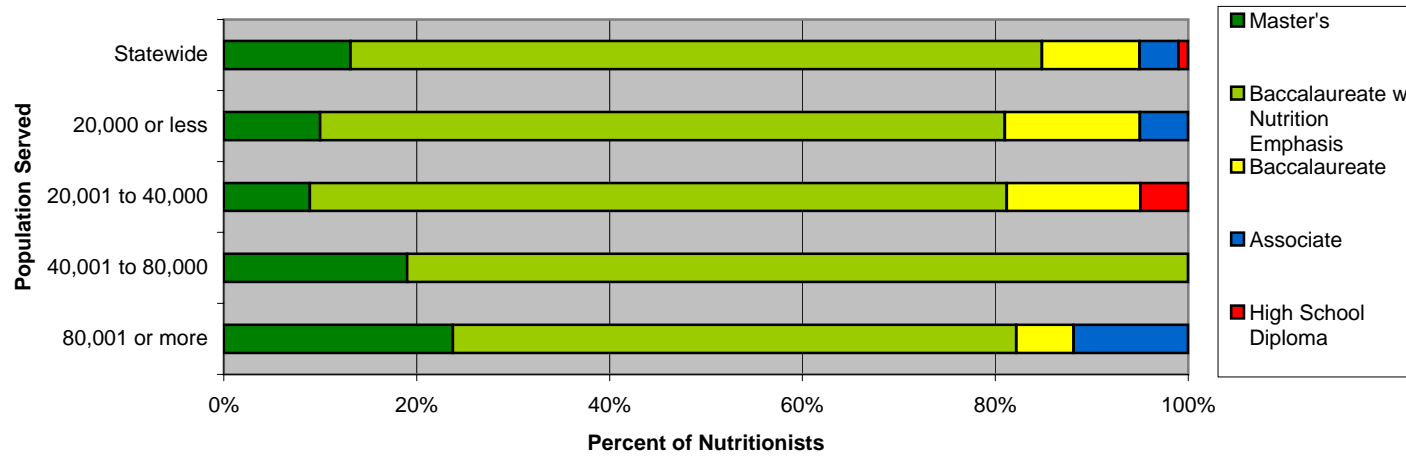
Environmental Specialists/Sanitarians - 7.9.4



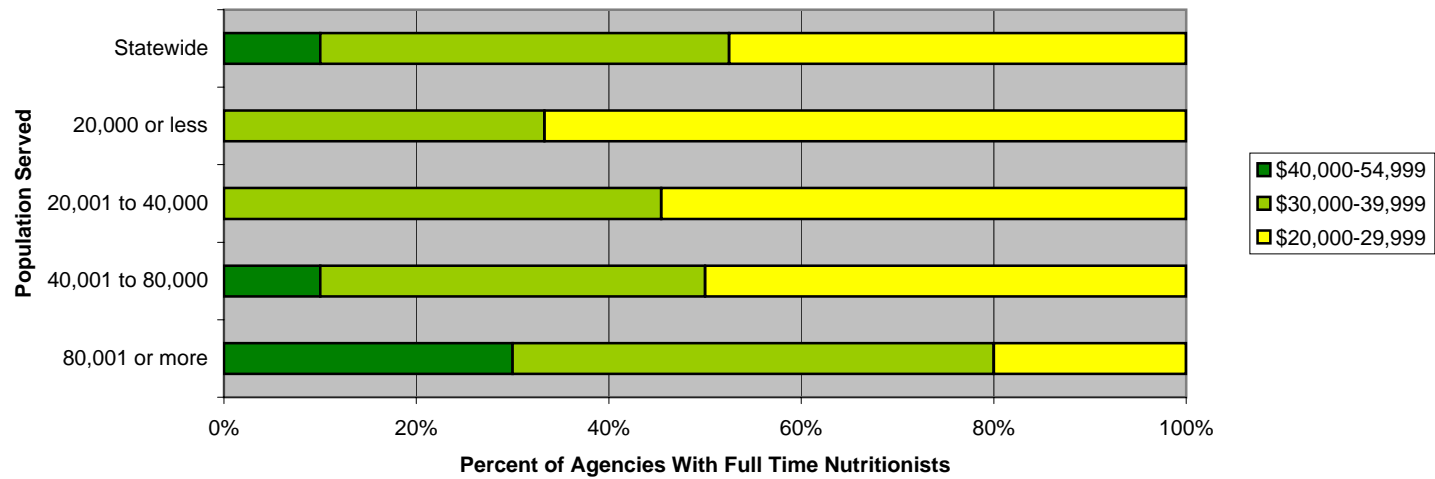
Full and Part Time Nutritionists - 7.10.1



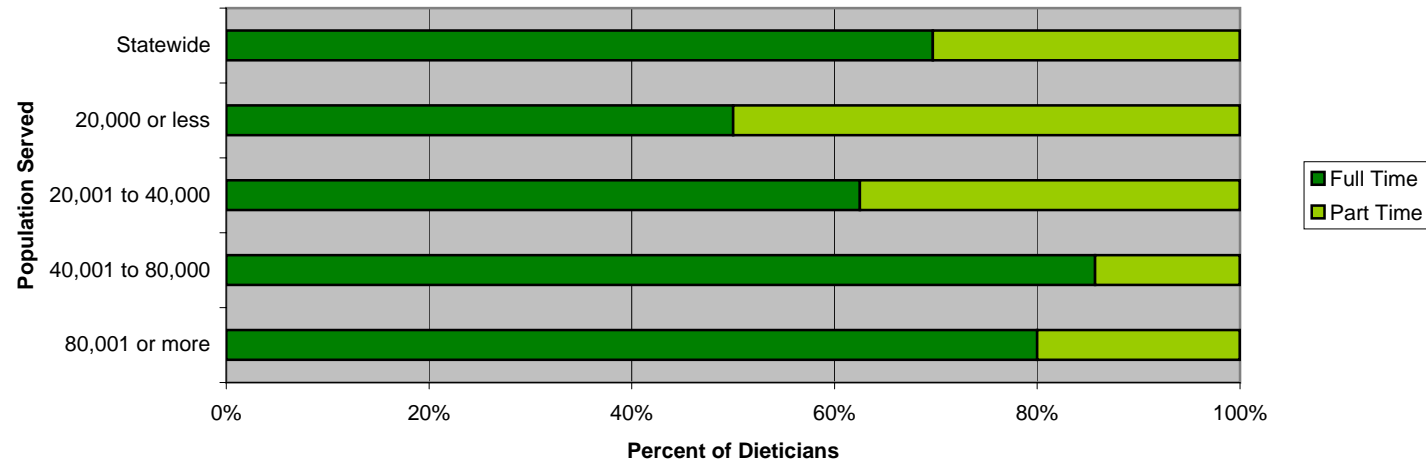
Highest Educational Level of All Nutritionists - 7.10.2



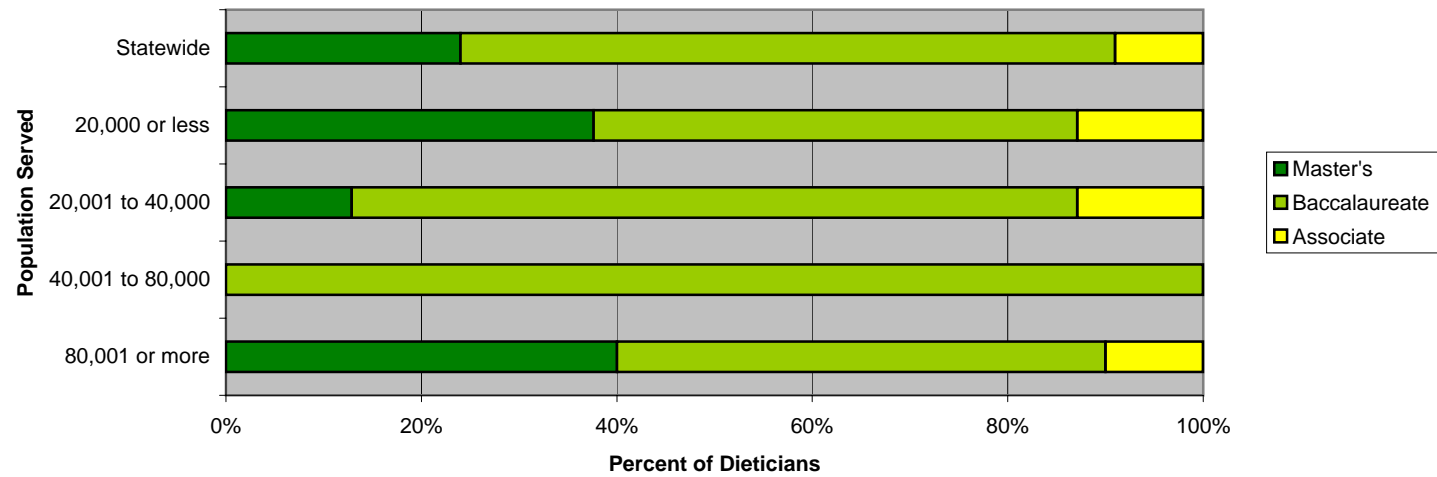
Annual Salary of Full Time Nutritionists - 7.10.3



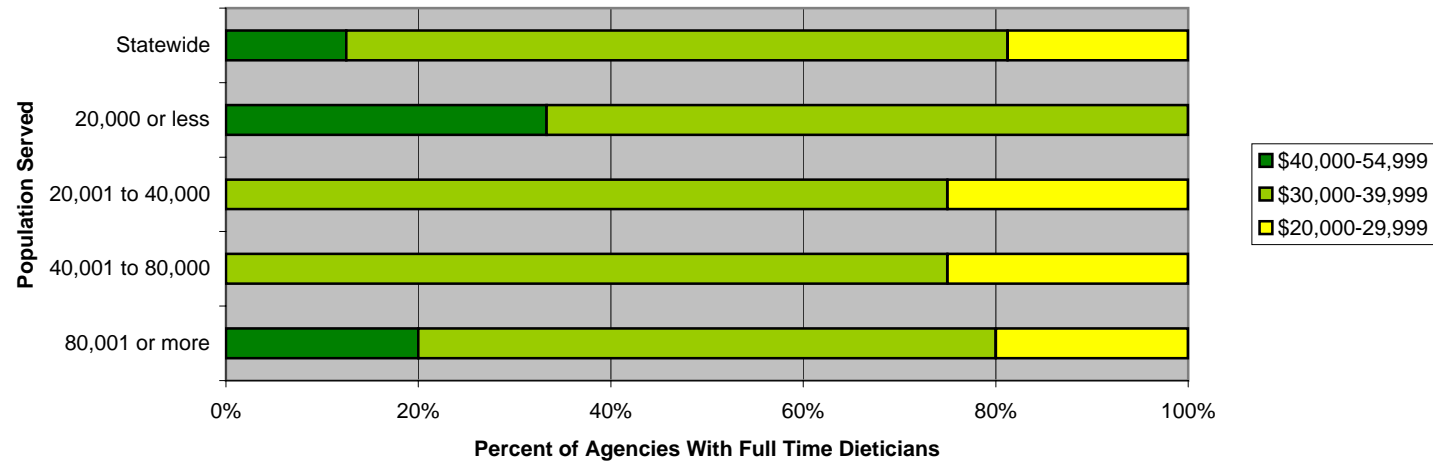
Full and Part Time Dietitians - 7.11.1



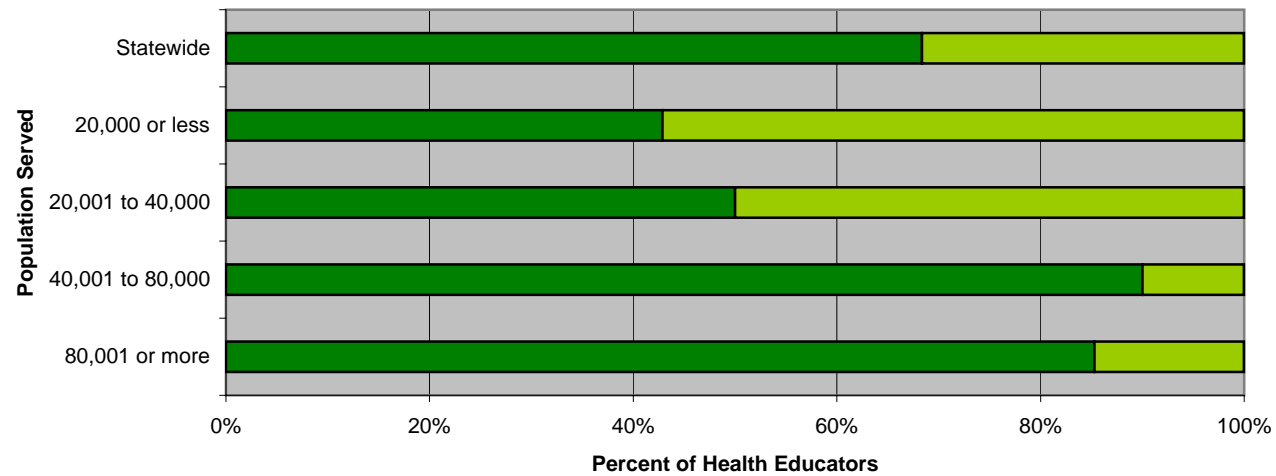
Highest Educational Level of All Dietitians - 7-11.2



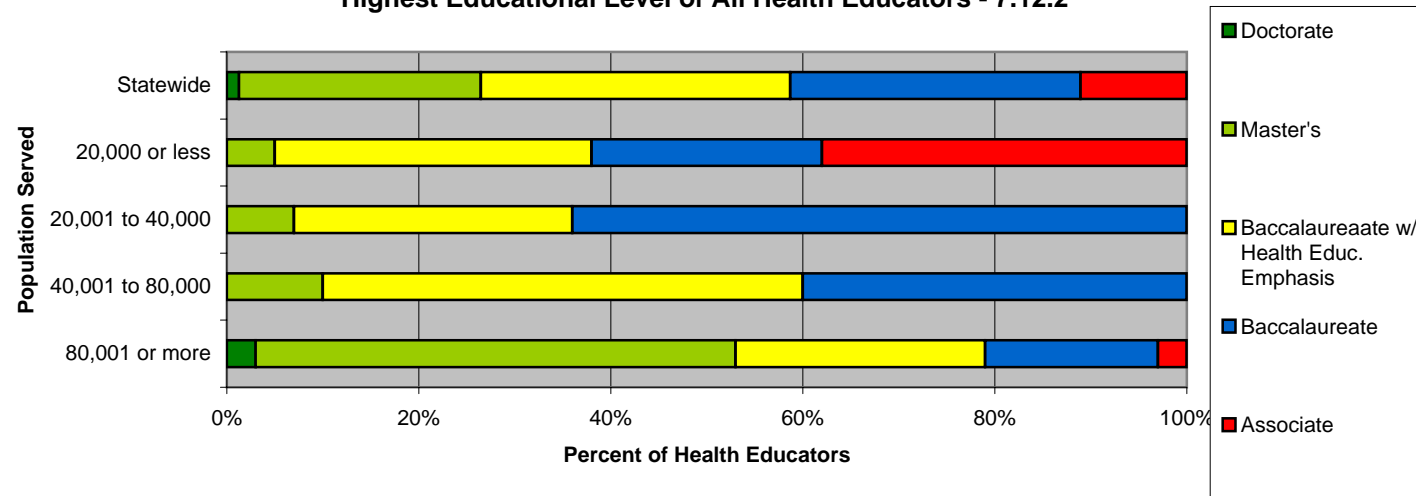
Annual Salary of Full Time Dietitians - 7.11.3



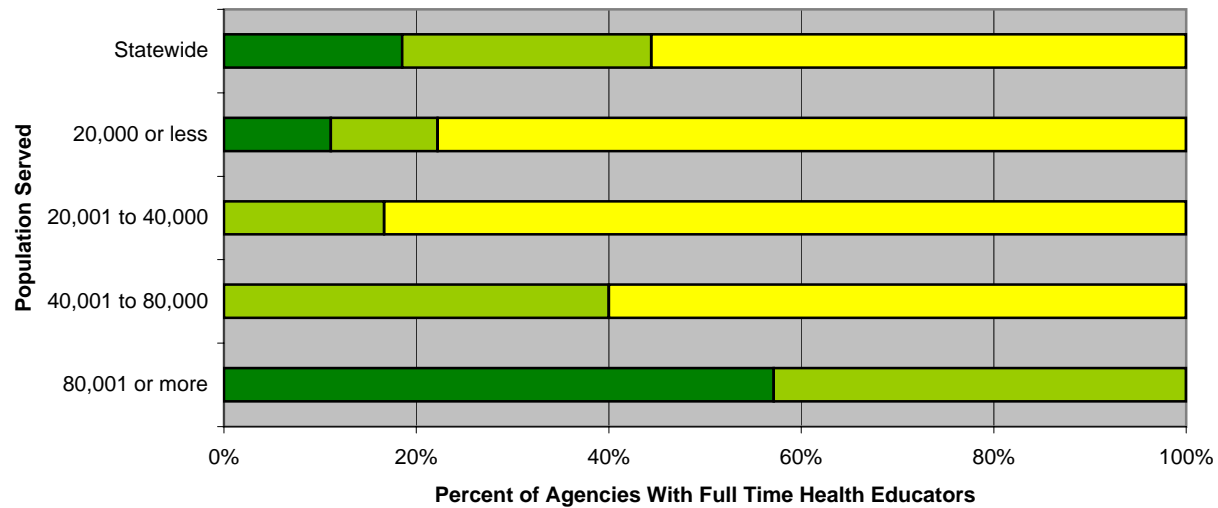
Full and Part Time Health Educators - 7.12.1



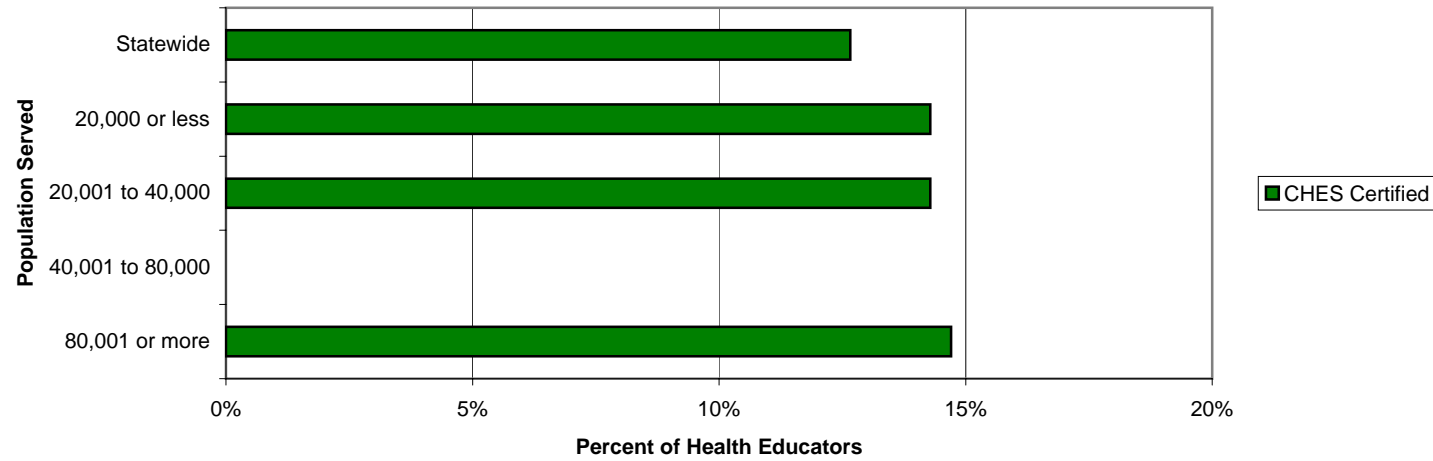
Highest Educational Level of All Health Educators - 7.12.2



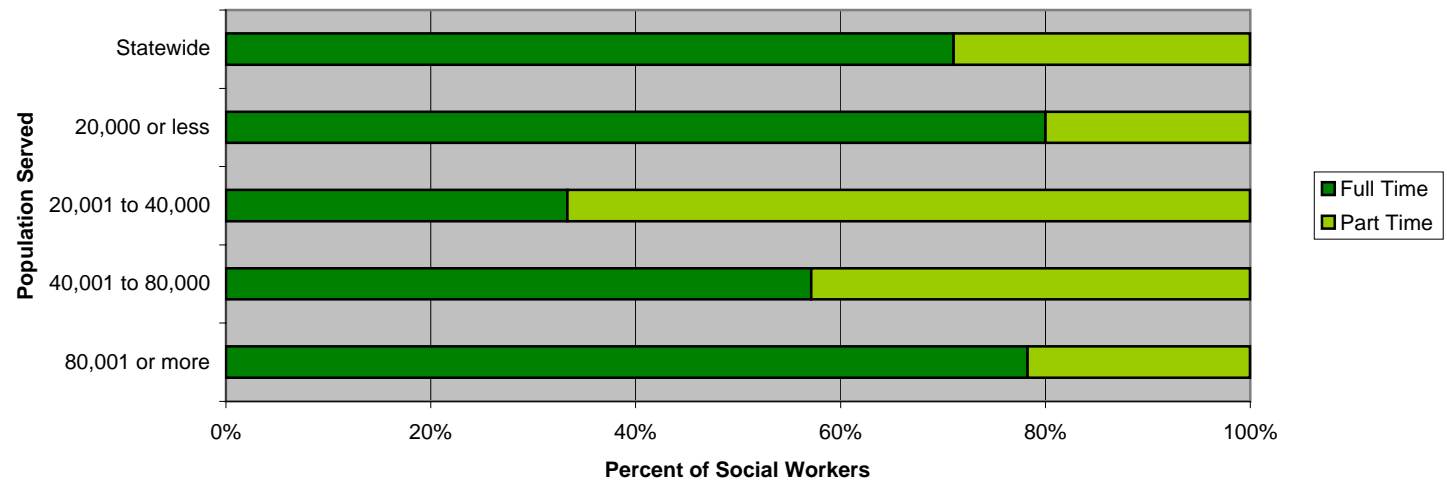
Annual Salary of Full Time Health Educators - 7.12.3



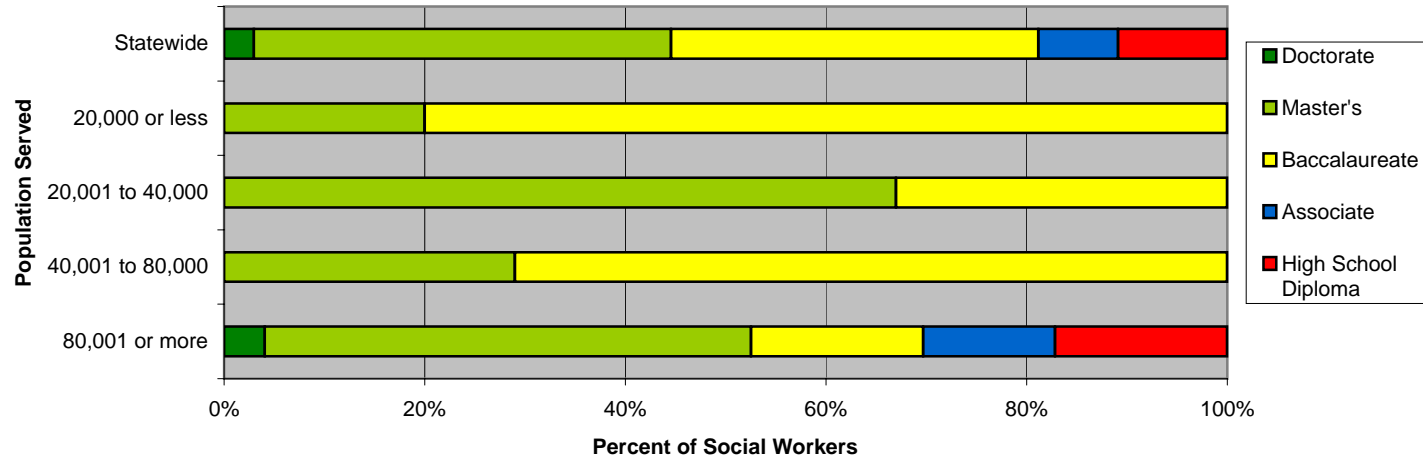
Health Educators CHES Certified - 7.12.4



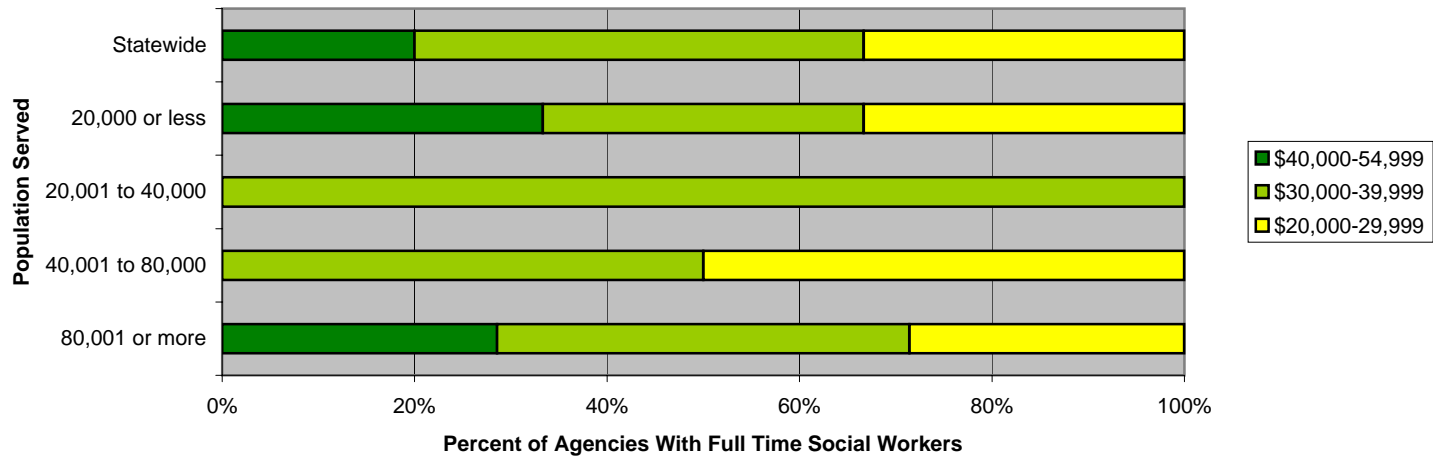
Full and Part Time Social Workers - 7.13.1



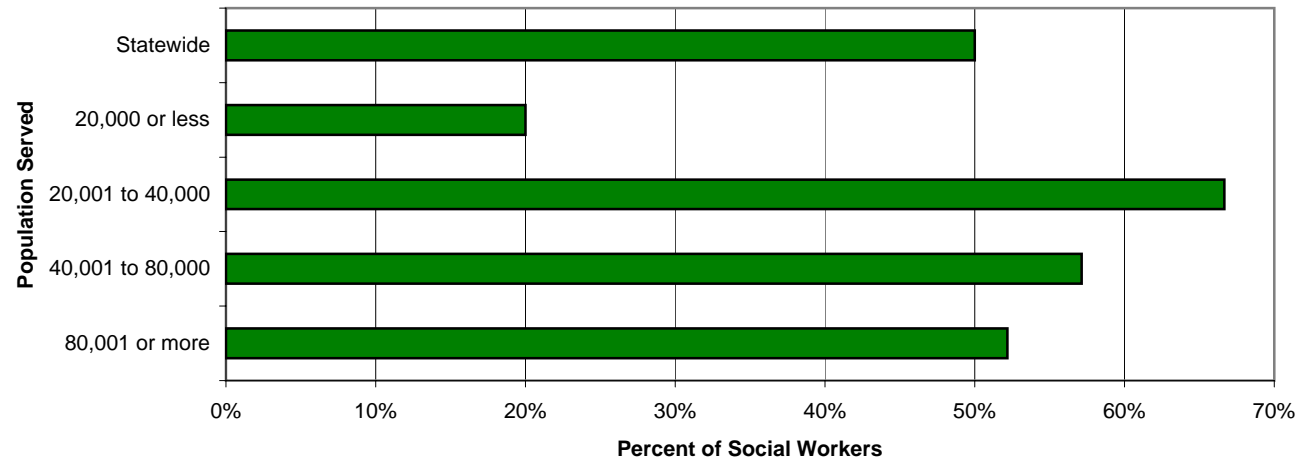
Highest Educational Level of All Social Workers - 7.13.2



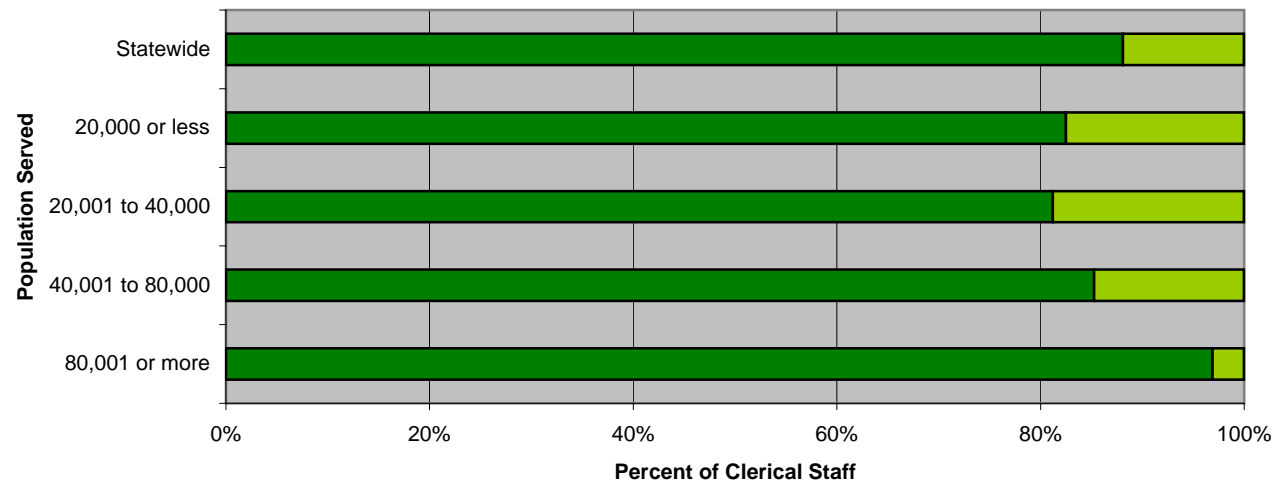
Annual Salary of Full Time Social Workers - 7.13.3



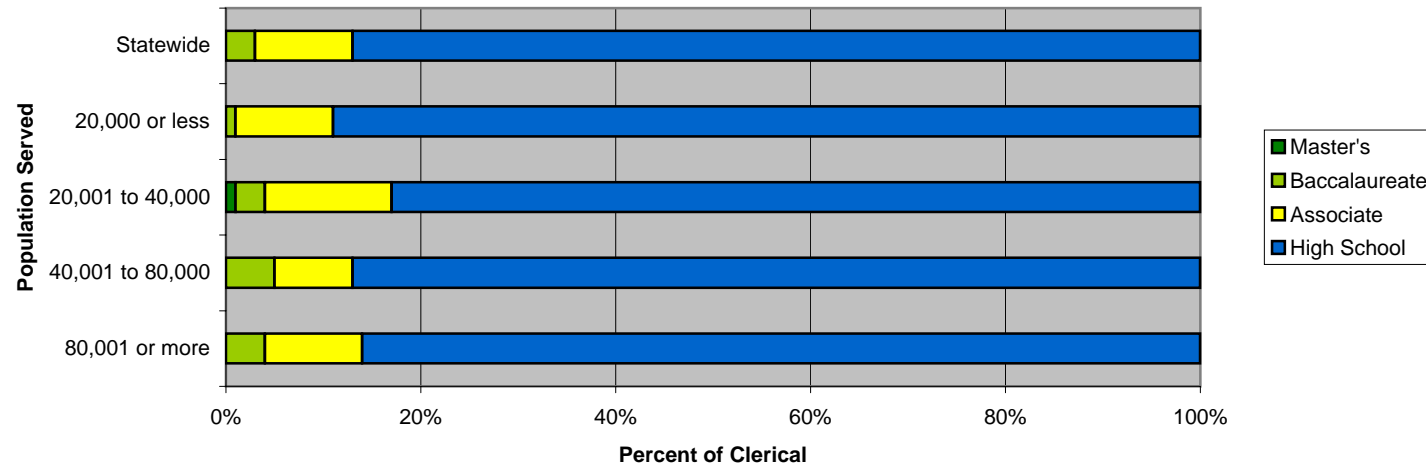
Licensed Social Workers - 7.13.4



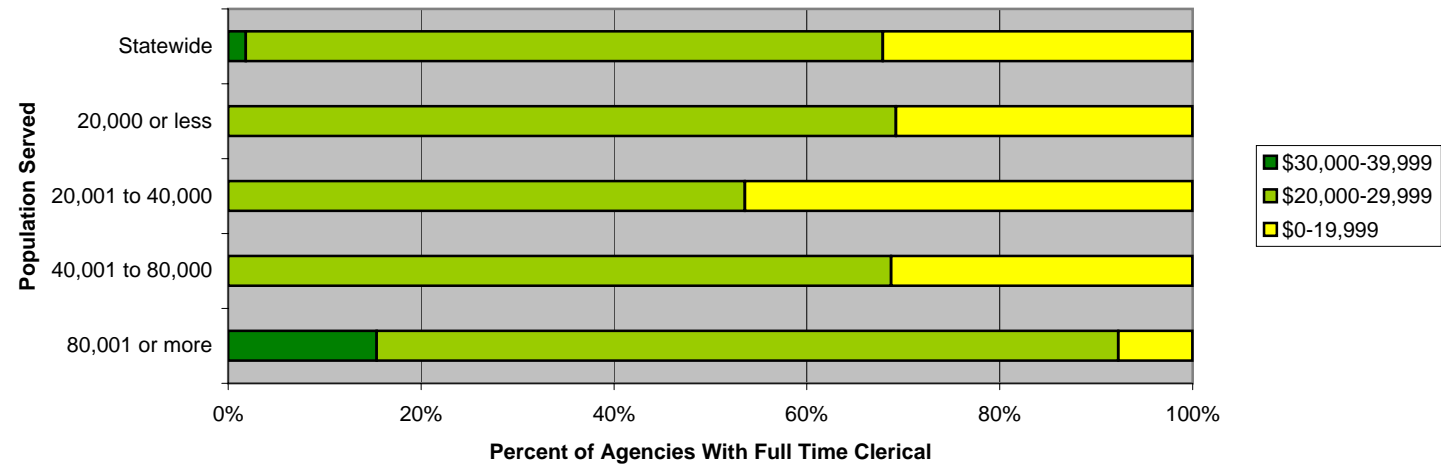
Full and Part Time Clerical - 7.14.1



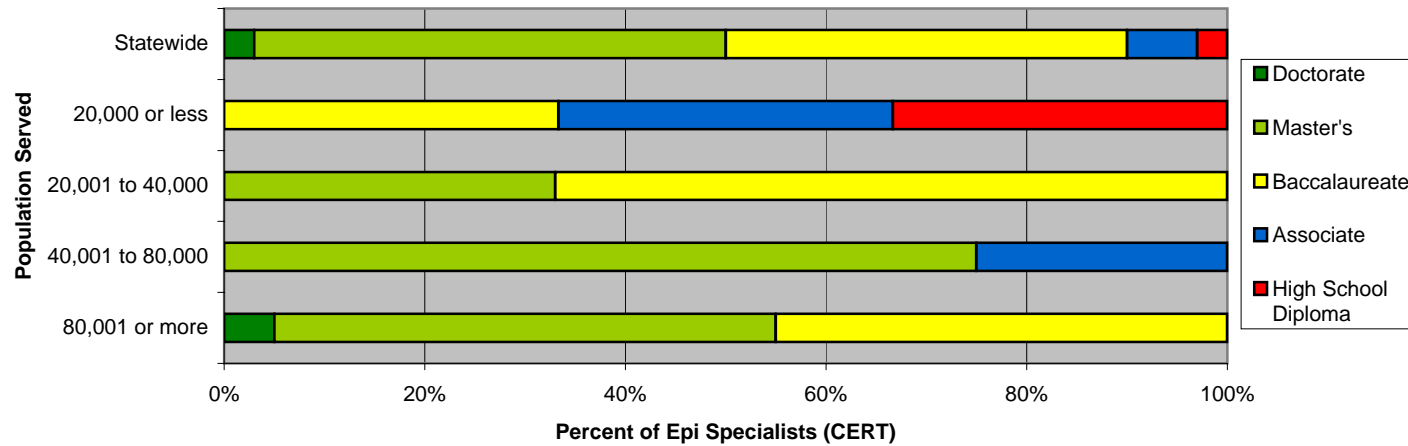
Highest Educational Level of All Clerical - 7.14.2



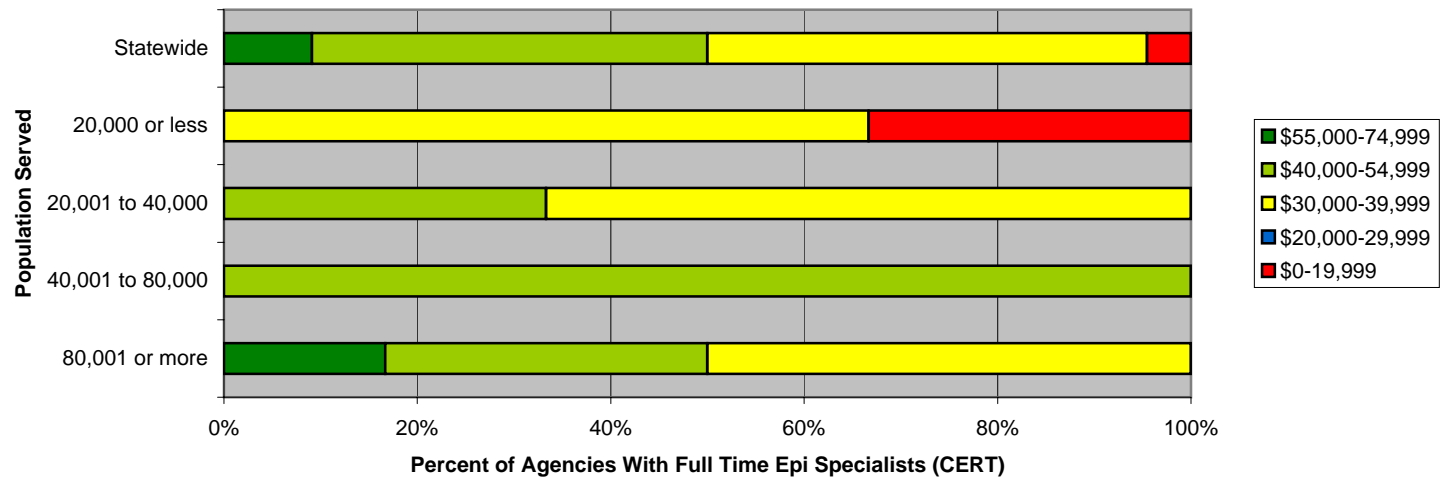
Annual Salary of Full Time Clerical - 7.14.3



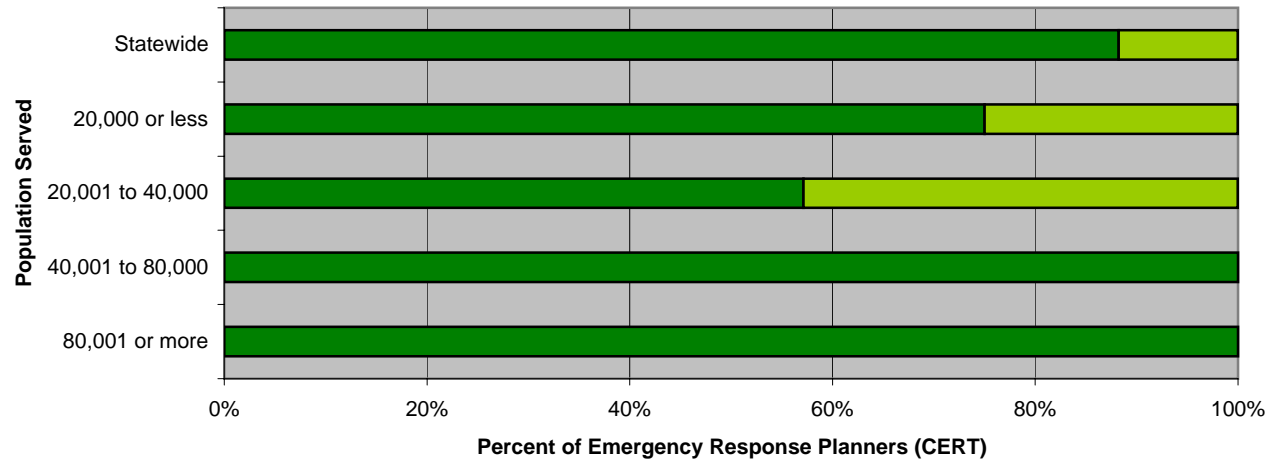
Highest Educational Level of Epi Specialists (CERT) - 7.15.2



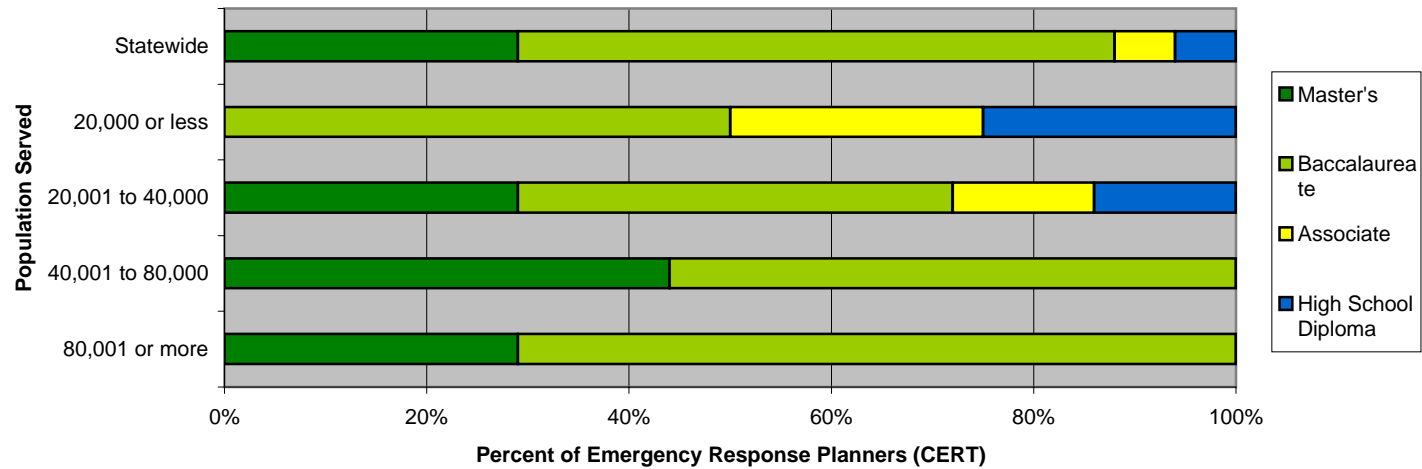
Annual Salary of Full Time Epi Specialists (CERT) - 7.15.3



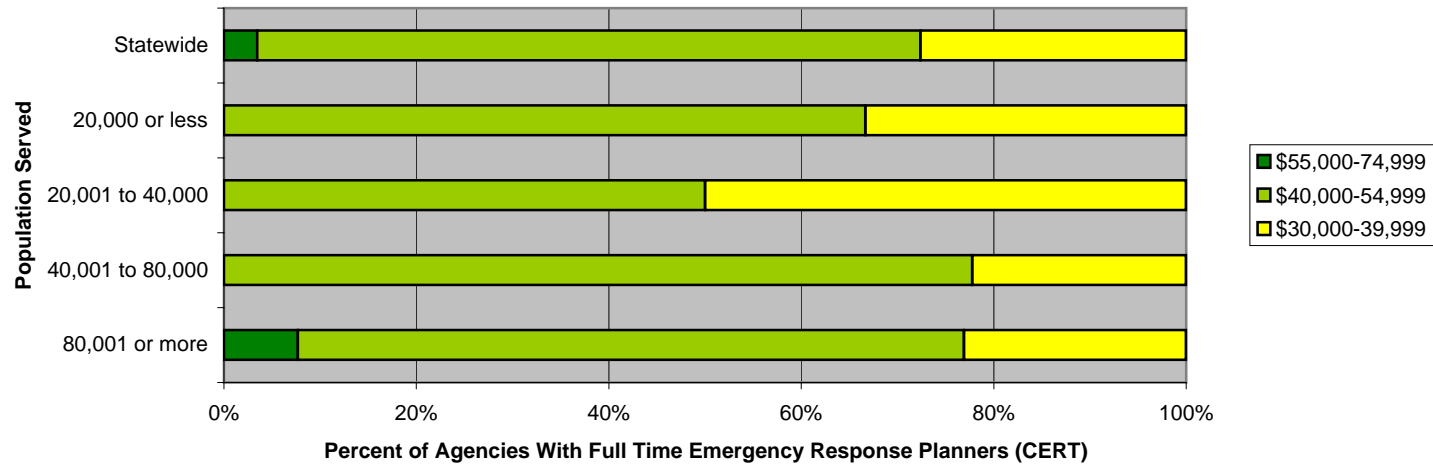
Full and Part Time Emergency Response Planners (CERT) 7.16.1



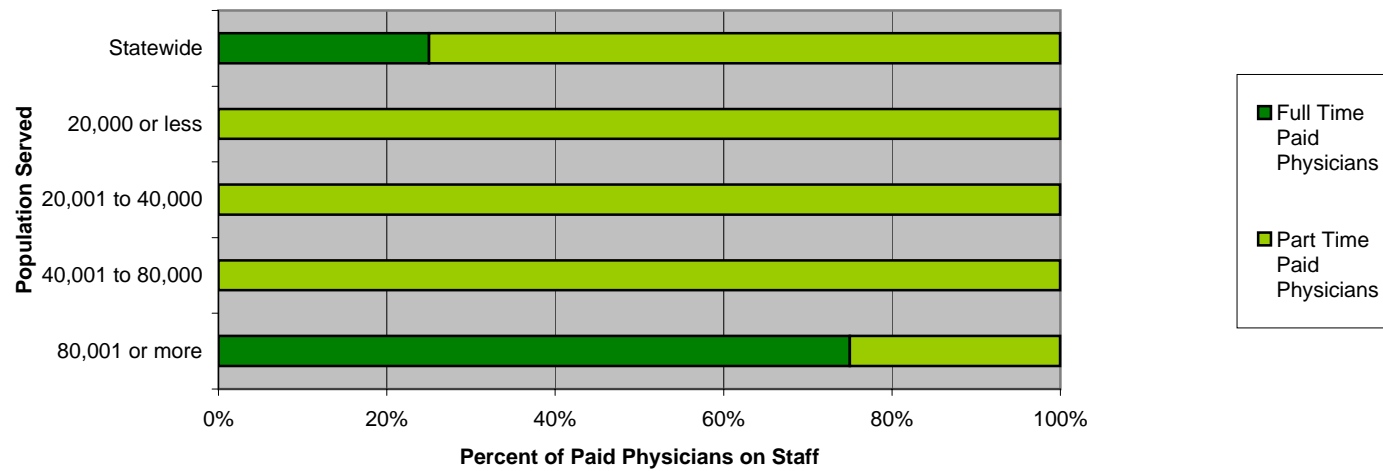
Highest Educational Level of All Emergency Response Planners (CERT) - 7.16.2



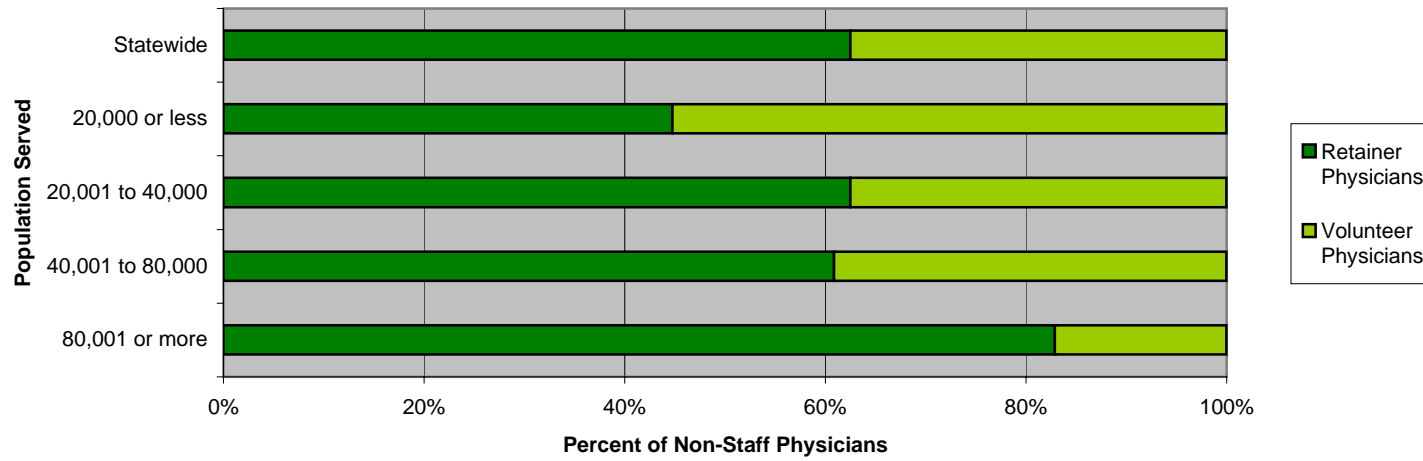
Annual Salary of Full Time Emergency Response Planners (CERT) - 7.16.3



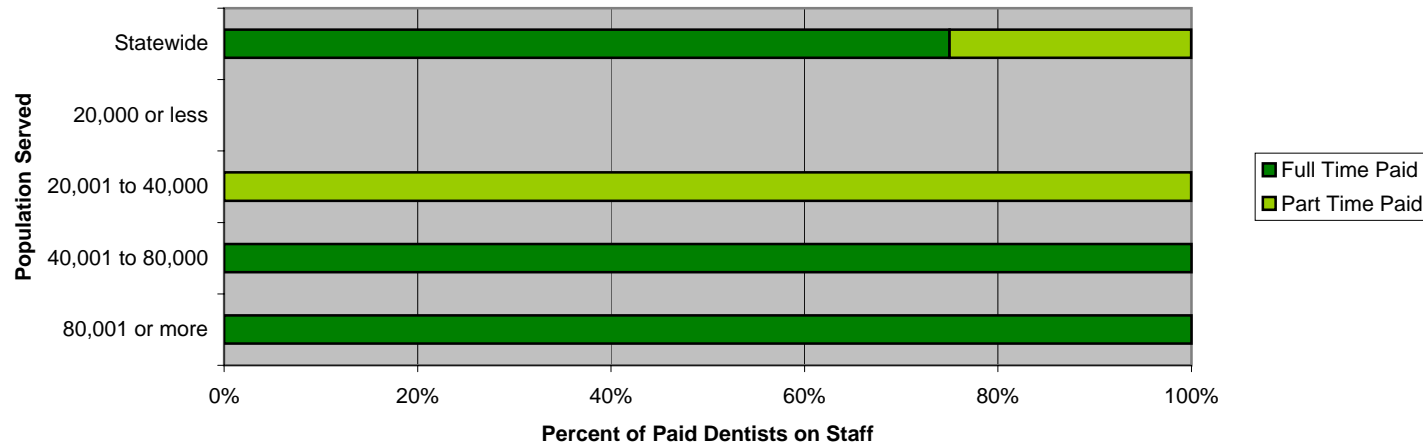
Full and Part Time Paid Physicians - 7.17.1



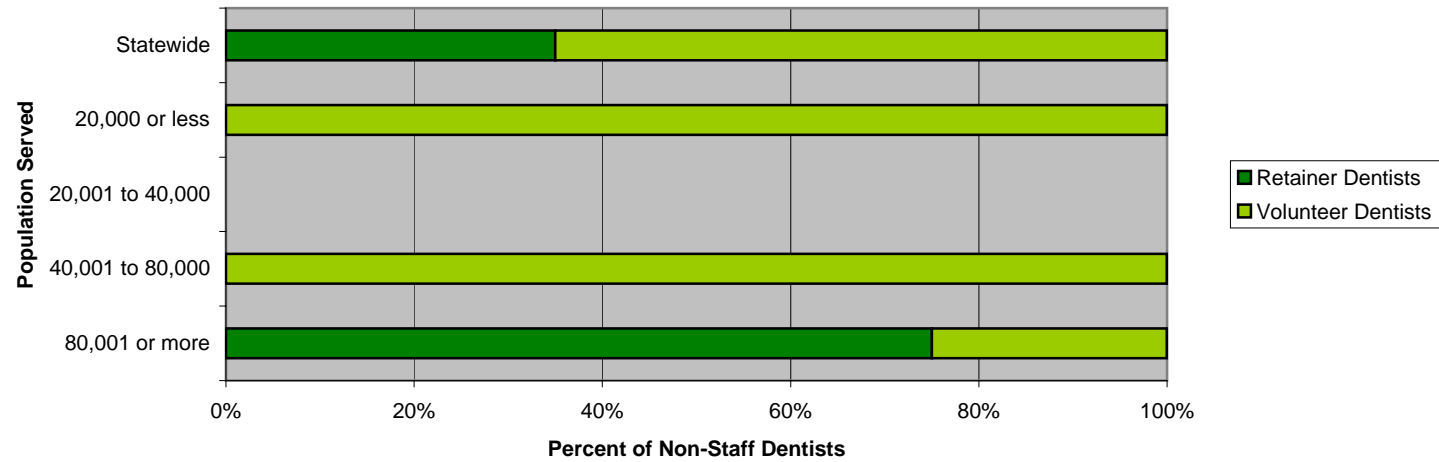
Relationship of Non-Staff Physicians - 7.17.1.3



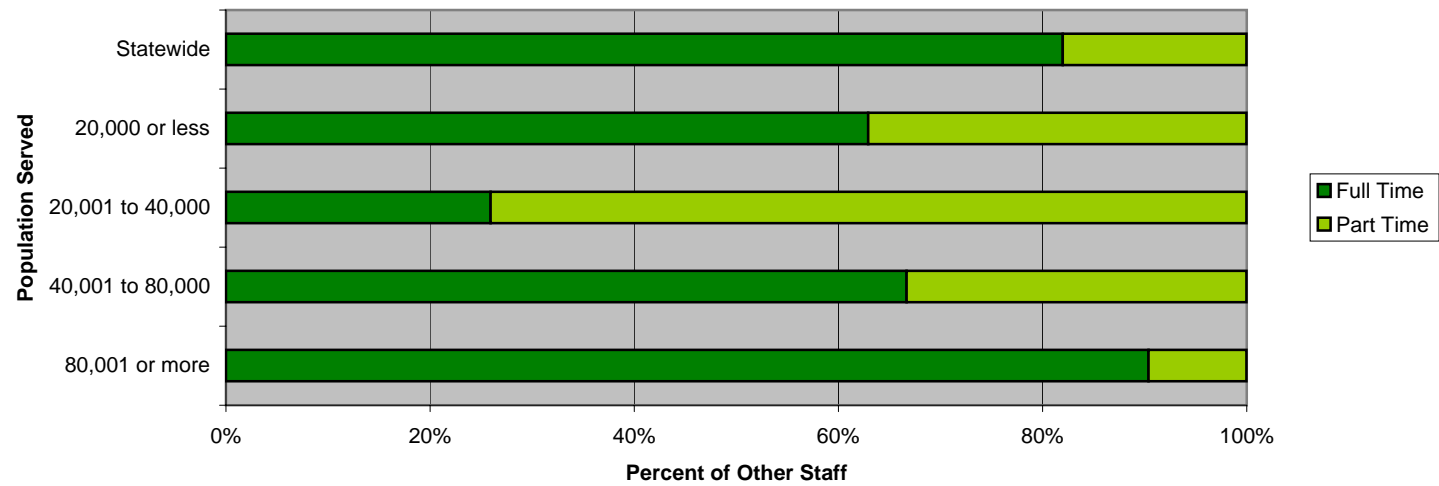
Full and Part Time Paid Dentists - 7.17.2.1



Relationship of Non-Staff Dentists - 7.17.2.3



Full and Part Time Other Staff - 7.18.1



DATA TABLES

CHAPTER 2 WORKFORCE

7. AGENCY WORKFORCE

	Total		Full-Time		Part-Time	
	Number	Percent	Number	Percent	Number	Percent
7.1. Total Staff						
114 Statewide	2922	100%	2383	82%	539	18%
56 Population up to 20,000	701	24%	481	69%	220	31%
29 Population between 20,001 and 40,000	457	16%	318	70%	139	30%
16 Population between 40,001 and 80,000	389	13%	323	83%	66	17%
13 Population over 80,001	1375	47%	1261	92%	114	8%

AGENCY WORKFORCE

	Total		Full-Time		Part-Time	
	Number	Percent	Number	Percent	Number	Percent
7.2. Staff Hired in Last Twelve Months						
114 Statewide	376	13%	241	64%	135	36%
56 Population up to 20,000	104	15%	70	67%	34	33%
29 Population between 20,001 and 40,000	53	12%	29	55%	24	45%
16 Population between 40,001 and 80,000	53	14%	35	66%	18	34%
13 Population over 80,001	166	12%	107	64%	59	36%

AGENCY WORKFORCE

7.3. Benefits for Full-Time Employees in Addition to Salary	Statewide		Population up to 20,000 (56 Agencies)		Population 20,001-40,000 (29 Agencies)		Population 40,001-80,000 (16 Agencies)		Population Over 80,001 (13 Agencies)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Health Insurance	107	94%	50	89%	28	97%	16	100%	13	100%
Dental Insurance	50	44%	13	23%	14	48%	11	69%	12	92%
Life Insurance	88	77%	37	66%	26	90%	12	75%	13	100%
Retirement Program	103	90%	47	84%	27	93%	16	100%	13	100%
Sick Leave	112	98%	54	96%	29	100%	16	100%	13	100%
Vacation/Annual Leave	113	99%	55	98%	29	100%	16	100%	13	100%
Tuition Reimbursement	37	32%	13	23%	9	31%	7	44%	8	62%
Educational Leave	45	39%	21	38%	10	34%	6	38%	8	62%
Continuing Education Payment	52	46%	23	41%	13	45%	7	44%	9	69%
Military Leave	101	89%	48	86%	27	93%	14	88%	12	92%
Deferred Compensation Plan	56	49%	16	29%	14	48%	13	81%	13	100%
Bereavement Leave	109	96%	53	95%	27	93%	16	100%	13	100%
Cafeteria Plan	57	50%	25	45%	11	38%	14	88%	7	54%

AGENCY WORKFORCE

7.4. Does your agency contribute to the following benefits for full-time employees?	Statewide		Population up to 20,000 (56 Agencies)		Population 20,001-40,000 (29 Agencies)		Population 40,001-80,000 (16 Agencies)		Population Over 80,001 (13 Agencies)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Health Insurance	105	92%	48	86%	28	97%	16	100%	13	100%
Dental Insurance	39	34%	8	14%	11	38%	8	50%	12	92%
Life Insurance	78	68%	33	59%	22	76%	11	69%	12	92%
Retirement Program	96	84%	43	77%	24	83%	16	100%	13	100%

AGENCY WORKFORCE

7.5. Do your staff (full/part-time) participate in the following professional development programs?	Statewide		Population up to 20,000 (56 Agencies)		Population 20,001-40,000 (29 Agencies)		Population 40,001-80,000 (16 Agencies)		Population Over 80,001 (13 Agencies)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Computer-Based Training	103	90%	48	86%	26	90%	16	100%	13	100%
Continuing Education Training	112	98%	55	98%	28	97%	16	100%	13	100%
College Course(s)	56	49%	23	41%	14	48%	11	69%	8	62%
Satellite Education Programs	107	94%	50	89%	28	97%	16	100%	13	100%

AGENCY WORKFORCE

7.6.1. Is your Administrator a Registered Nurse?

	Total	
	Number	Percent
114 Statewide	51	45%
56 Population up to 20,000	31	55%
29 Population between 20,001 and 40,000	12	41%
16 Population between 40,001 and 80,000	8	50%
13 Population over 80,001	0	0%

AGENCY WORKFORCE

7.6.2. Is your Administrator a Nurse Practitioner?

	Total	
	Number	Percent
114 Statewide	4	4%
56 Population up to 20,000	1	2%
29 Population between 20,001 and 40,000	1	3%
16 Population between 40,001 and 80,000	2	13%
13 Population over 80,001	0	0%

AGENCY WORKFORCE

7.6.3. Staffing Positions:

Administrator

	100%		75-99%		50-74%		25-49%		Less than 25%	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Time devoted to administrative duties.										
114 Statewide	63	55%	24	21%	21	18%	5	4%	1	1%
56 Population up to 20,000	21	38%	15	27%	15	27%	5	9%	0	0%
29 Population between 20,001 and 40,000	17	59%	7	24%	5	17%	0	0%	0	0%
16 Population between 40,001 and 80,000	13	81%	2	13%	1	6%	0	0%	0	0%
13 Population over 80,001	12	92%	0	0%	0	0%	0	0%	1	8%

AGENCY WORKFORCE

7.6.4. Staffing Positions:

Administrator

Highest Educational Level of Administrator

	Doctorate		Master's		Baccalaureate		Associate		High School	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	3	3%	24	21%	33	29%	33	29%	21	18%
56 Population up to 20,000	0	0%	4	7%	16	29%	21	38%	15	27%
29 Population between 20,001 and 40,000	0	0%	8	28%	5	17%	10	34%	6	21%
16 Population between 40,001 and 80,000	0	0%	4	25%	10	63%	2	13%	0	0%
13 Population over 80,001	3	23%	8	62%	2	15%	0	0%	0	0%

AGENCY WORKFORCE

7.6.5. Staffing Positions:**Administrator**

How many years of service as Administrator/Director of this agency.

	21 or more years		11-20 years		6-10 years		3-5 years		0-2 years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	13	11%	26	23%	22	19%	25	22%	28	25%
56 Population up to 20,000	6	11%	15	27%	8	14%	12	21%	15	27%
29 Population between 20,001 and 40,000	4	14%	9	31%	6	21%	1	3%	9	31%
16 Population between 40,001 and 80,000	3	19%	2	13%	4	25%	6	38%	1	6%
13 Population over 80,001	0	0%	0	0%	4	31%	6	46%	3	23%

AGENCY WORKFORCE**7.6.6. Staffing Positions:****Administrator**

Is Administrator/Director currently working toward a baccalaureate degree?

	Total Agencies	
	Number	Percent
114 Statewide	13	11%
56 Population up to 20,000	8	14%
29 Population between 20,001 and 40,000	3	10%
16 Population between 40,001 and 80,000	0	0%
13 Population over 80,001	1	8%

AGENCY WORKFORCE**7.6.7. Staffing Positions:****Administrator**

Annual salary of Administrator/Director

	\$75,000 or over		\$55,000- 74,999		\$40,000- 54,999		\$30,000- 39,999		\$20,000- 29,999	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	11	10%	16	14%	47	41%	32	28%	8	7%
56 Population up to 20,000	0	0%	2	4%	28	50%	22	39%	4	7%
29 Population between 20,001 and 40,000	1	3%	3	10%	14	48%	8	28%	3	10%
16 Population between 40,001 and 80,000	0	0%	10	63%	4	25%	1	6%	1	6%
13 Population over 80,001	10	77%	1	8%	1	8%	1	8%	0	0%

AGENCY WORKFORCE

7.7.1. Staffing Positions:

Registered Nurses

There are registered nurses on staff.

	Total Agencies	
	Number	Percent
114 Statewide	113	99%
56 Population up to 20,000	55	98%
29 Population between 20,001 and 40,000	29	100%
16 Population between 40,001 and 80,000	16	100%
13 Population over 80,001	13	100%

AGENCY WORKFORCE

7.7.1.1. & 7.7.1.2. Staffing Positions:

Registered Nurses

	Total Registered Nurses		Full-Time Registered Nurses		Part-Time Registered Nurses	
	Number	Percent*	Number	Percent	Number	Percent
114 Statewide	669	23%	518	77%	151	23%
56 Population up to 20,000	217	31%	152	70%	65	30%
29 Population between 20,001 and 40,000	121	26%	89	74%	32	26%
16 Population between 40,001 and 80,000	110	28%	87	79%	23	21%
13 Population over 80,001	221	16%	190	86%	31	14%

*Percent of total Workforce

AGENCY WORKFORCE

7.7.1.3. & 7.7.1.4 Staffing Positions:

Registered Nurses

Number of Registered Nurses who are Nurse Practitioners

	Total Nurse Practitioners		Full-Time Nurse Practitioners		Part-Time Nurse Practitioners	
	Number	Percent*	Number	Percent	Number	Percent
114 Statewide	8	1%	5	63%	3	38%
56 Population up to 20,000	7	3%	4	57%	3	43%
29 Population between 20,001 and 40,000	1	1%	1	100%	0	0%
16 Population between 40,001 and 80,000	0	0%	0	0%	0	0%
13 Population over 80,001	0	0%	0	0%	0	0%

*Percent of total Registered Nurses

AGENCY WORKFORCE

7.7.2. Staffing Positions:

Registered Nurses

Highest Educational Level of All Registered Nurses

	Master's		Baccalaureate (BSN)		Baccalaureate (Other)		Associate (ADN)		Diploma	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	25	4%	196	29%	17	3%	241	36%	190	28%
56 Population up to 20,000	2	1%	56	26%	6	3%	106	49%	47	22%
29 Population between 20,001 and 40,000	4	3%	24	20%	2	2%	48	40%	43	36%
16 Population between 40,001 and 80,000	1	1%	28	25%	1	1%	56	51%	24	22%
13 Population over 80,001	18	8%	88	40%	8	4%	31	14%	76	34%

AGENCY WORKFORCE

7.7.2. Staffing Positions:

Registered Nurses

Highest Educational Level of Full-Time Registered Nurses

	Master's		Baccalaureate (BSN)		Baccalaureate (Other)		Associate (ADN)		Diploma	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	19	4%	154	30%	14	3%	199	38%	132	25%
56 Population up to 20,000	1	1%	36	24%	5	3%	80	53%	30	20%
29 Population between 20,001 and 40,000	3	3%	18	20%	1	1%	42	47%	25	28%
16 Population between 40,001 and 80,000	1	1%	23	26%	1	1%	47	54%	15	17%
13 Population over 80,001	14	7%	77	41%	7	4%	30	16%	62	33%

AGENCY WORKFORCE

7.7.2. Staffing Positions:

Registered Nurses

Highest Educational Level of Part-Time Registered Nurses

	Master's		Baccalaureate (BSN)		Baccalaureate (Other)		Associate (ADN)		Diploma	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	6	4%	42	28%	3	2%	42	28%	58	38%
56 Population up to 20,000	1	2%	20	31%	1	2%	26	40%	17	26%
29 Population between 20,001 and 40,000	1	3%	6	19%	1	3%	6	19%	18	56%
16 Population between 40,001 and 80,000	0	0%	5	22%	0	0%	9	39%	9	39%
13 Population over 80,001	4	13%	11	35%	1	3%	1	3%	14	45%

AGENCY WORKFORCE

7.7.3. Staffing Positions:

Registered Nurses

Number of Registered Nurses currently working toward higher degree.

	Number	Percent
114 Statewide	63	9%
56 Population up to 20,000	42	19%
29 Population between 20,001 and 40,000	4	3%
16 Population between 40,001 and 80,000	5	5%
13 Population over 80,001	12	5%

AGENCY WORKFORCE

7.7.4. Staffing Positions:

Registered Nurses

Number of nurses certified by American Nurse Credential Center (ANCC) as a community health nurse.

	Number	Percent
114 Statewide	25	4%
56 Population up to 20,000	10	5%
29 Population between 20,001 and 40,000	7	6%
16 Population between 40,001 and 80,000	0	0%
13 Population over 80,001	8	4%

AGENCY WORKFORCE

7.7.5. Staffing Positions:

Registered Nurses

Number of nurses (who do not have a BSN) who have completed a baccalaureate level course in the principles of community/public health nursing.

	Number	Percent
114 Statewide	48	11%
56 Population up to 20,000	8	5%
29 Population between 20,001 and 40,000	10	11%
16 Population between 40,001 and 80,000	9	11%
13 Population over 80,001	21	18%

AGENCY WORKFORCE

7.7.6. Staffing Positions:

Registered Nurses

Number of nurses practicing population-based public health nursing.

	Number	Percent
114 Statewide	454	68%
56 Population up to 20,000	155	71%
29 Population between 20,001 and 40,000	88	73%
16 Population between 40,001 and 80,000	74	67%
13 Population over 80,001	137	62%

AGENCY WORKFORCE

7.7.7. Staffing Positions:

Registered Nurses

	\$40,000- 54,999		\$30,000- 39,999		\$20,000- 29,999	
Annual salary of full-time registered nurses.	Number	Percent	Number	Percent	Number	Percent
114 Statewide	12	11%	70	67%	23	22%
56 Population up to 20,000	2	4%	34	69%	13	27%
29 Population between 20,001 and 40,000	2	7%	20	74%	5	19%
16 Population between 40,001 and 80,000	2	13%	9	56%	5	31%
13 Population over 80,001	6	46%	7	54%	0	0%

Note: Percentages based on 105 agencies that have full-time registered nurses.

AGENCY WORKFORCE

7.8.1. Staffing Positions:

Licensed Practical Nurses

	Total Agencies	
There are licensed practical nurses on staff.	Number	Percent
114 Statewide	59	52%
56 Population up to 20,000	32	57%
29 Population between 20,001 and 40,000	12	41%
16 Population between 40,001 and 80,000	9	56%
13 Population over 80,001	6	46%

AGENCY WORKFORCE

7.8.1.1. Staffing Positions:

Licensed Practical Nurses

	Total Licensed Practical Nurses		Full-Time Licensed Practical Nurses		Part-Time Licensed Parctical Nurses	
	Number	Percent*	Number	Percent	Number	Percent
114 Statewide	108	4%	78	72%	30	28%
56 Population up to 20,000	57	8%	37	65%	20	35%
29 Population between 20,001 and 40,000	20	4%	14	70%	6	30%
16 Population between 40,001 and 80,000	18	5%	15	83%	3	17%
13 Population over 80,001	13	1%	12	92%	1	8%

*Percent of total Workforce

AGENCY WORKFORCE

7.8.2. Staffing Positions:

Licensed Practical Nurses

Annual salary of full-time licensed practical nurses.	\$30,000-39,999		\$20,000-29,999		\$0-\$19,999	
	Number	Percent	Number	Percent	Number	Percent
114 Statewide	7	16%	37	82%	1	2%
56 Population up to 20,000	2	9%	19	86%	1	5%
29 Population between 20,001 and 40,000	1	11%	8	89%	0	0%
16 Population between 40,001 and 80,000	1	11%	8	89%	0	0%
13 Population over 80,001	3	60%	2	40%	0	0%

Note: Percentages based on 45 agencies that have full-time licensed practical nurses.

AGENCY WORKFORCE

7.9.1. Staffing Positions:

Environmental Specialists/Sanitararians

There are Environmental Specialists/Sanitararians on staff.	Total Agencies	
	Number	Percent
114 Statewide	98	86%
56 Population up to 20,000	43	77%
29 Population between 20,001 and 40,000	27	93%
16 Population between 40,001 and 80,000	16	100%
13 Population over 80,001	12	92%

AGENCY WORKFORCE

7.9.1. Staffing Positions:

Environmental Specialists/Sanitararians

	Total Environmental Specialists/Sanitararians		Full-Time Environmental Specialists/Sanitararians		Part-Time Environmental Specialists/Sanitararians	
	Number	Percent*	Number	Percent	Number	Percent
114 Statewide	338	12%	292	86%	46	14%
56 Population up to 20,000	47	7%	19	40%	28	60%
29 Population between 20,001 and 40,000	40	9%	33	83%	7	18%
16 Population between 40,001 and 80,000	44	11%	40	91%	4	9%
13 Population over 80,001	207	15%	200	97%	7	3%

*Percent of total Workforce

AGENCY WORKFORCE

7.9.2.1. Staffing Positions:

Environmental Specialists/Sanitarrians

Highest Educational Level of **All** Environmental

Specialists/Sanitarrians

	Doctorate or Master's		Baccalaureate W/ Envir. Emphasis		Baccalaureate		Associate		High School Diploma	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	33	10%	148	44%	95	28%	10	3%	52	15%
56 Population up to 20,000	6	13%	17	36%	14	30%	3	6%	7	15%
29 Population between 20,001 and 40,000	3	8%	14	35%	18	45%	1	3%	4	10%
16 Population between 40,001 and 80,000	8	18%	26	59%	4	9%	4	9%	2	5%
13 Population over 80,001	16	8%	91	44%	59	29%	2	1%	39	19%

AGENCY WORKFORCE

7.9.2.1. Staffing Positions:

Environmental Specialists/Sanitarrians

Highest Educational Level of **Full-Time** Environmental

Specialists/Sanitarrians

	Doctorate or Master's		Baccalaureate W/ Envir. Emphasis		Baccalaureate		Associate		High School Diploma	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	26	9%	132	45%	81	28%	9	3%	44	15%
56 Population up to 20,000	1	5%	6	32%	6	32%	2	11%	4	21%
29 Population between 20,001 and 40,000	3	9%	11	33%	15	45%	1	3%	3	9%
16 Population between 40,001 and 80,000	7	18%	25	63%	3	8%	4	10%	1	3%
13 Population over 80,001	15	8%	90	45%	57	29%	2	1%	36	18%

AGENCY WORKFORCE

7.9.2.1. Staffing Positions:

Environmental Specialists/Sanitarrians

Highest Educational Level of **Part-Time** Environmental

Specialists/Sanitarrians

	Doctorate or Master's		Baccalaureate W/ Envir. Emphasis		Baccalaureate		Associate		High School Diploma	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	7	15%	16	35%	14	30%	1	2%	8	17%
56 Population up to 20,000	5	18%	11	39%	8	29%	1	4%	3	11%
29 Population between 20,001 and 40,000	0	0%	3	43%	3	43%	0	0%	1	14%
16 Population between 40,001 and 80,000	1	25%	1	25%	1	25%	0	0%	1	25%
13 Population over 80,001	1	14%	1	14%	2	29%	0	0%	3	43%

AGENCY WORKFORCE

7.9.3. Staffing Positions:

Environmental Specialists/Sanitararians

	\$40,000- 54,999		\$30,000- 39,999		\$20,000- 29,999	
Annual salary of full-time environmental specialists/sanitararians.	Number	Percent	Number	Percent	Number	Percent
114 Statewide	7	10%	41	60%	20	29%
56 Population up to 20,000	1	6%	7	41%	9	53%
29 Population between 20,001 and 40,000	1	4%	16	64%	8	32%
16 Population between 40,001 and 80,000	1	7%	11	79%	2	14%
13 Population over 80,001	4	33%	7	58%	1	8%

Note: Percentages based on 68 agencies that have full-time environmental specialists/sanitararians.

AGENCY WORKFORCE

7.9.4.1. Staffing Positions:

Environmental Specialists/Sanitararians

Number of state certified environmental specialists/sanitararians.	Number	Percent
114 Statewide	68	20%
56 Population up to 20,000	10	21%
29 Population between 20,001 and 40,000	16	40%
16 Population between 40,001 and 80,000	18	41%
13 Population over 80,001	24	12%

AGENCY WORKFORCE

7.9.4.2. Staffing Positions:

Environmental Specialists/Sanitararians

Number of national register environmental specialists/sanitararians.

	Number	Percent
114 Statewide	14	4%
56 Population up to 20,000	2	4%
29 Population between 20,001 and 40,000	2	5%
16 Population between 40,001 and 80,000	2	5%
13 Population over 80,001	8	4%

AGENCY WORKFORCE

7.10.1. Staffing Positions:

Nutritionists

There are nutritionists on staff.

Total Agencies		
	Number	Percent
114 Statewide	81	71%
56 Population up to 20,000	41	73%
29 Population between 20,001 and 40,000	19	66%
16 Population between 40,001 and 80,000	11	69%
13 Population over 80,001	10	77%

AGENCY WORKFORCE

7.10.1.1. Staffing Positions:

Nutritionists

	Total Nutritionists		Full-Time Nutritionists		Part-Time Nutritionists	
	Number	Percent*	Number	Percent	Number	Percent
114 Statewide	97	3%	49	51%	48	49%
56 Population up to 20,000	42	6%	9	21%	33	79%
29 Population between 20,001 and 40,000	22	5%	11	50%	11	50%
16 Population between 40,001 and 80,000	16	4%	14	88%	2	13%
13 Population over 80,001	17	1%	15	88%	2	12%

*Percent of total Workforce

AGENCY WORKFORCE

7.10.2. Staffing Positions:

Nutritionists

Highest Educational Level of All Nutritionists

	Master's		Baccalaureate with Nutrition Emphasis		Baccalaureate		Associate		High School Diploma	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	13	13%	69	71%	10	10%	4	4%	1	1%
56 Population up to 20,000	4	10%	30	71%	6	14%	2	5%	0	0%
29 Population between 20,001 and 40,000	2	9%	16	73%	3	14%	0	0%	1	5%
16 Population between 40,001 and 80,000	3	19%	13	81%	0	0%	0	0%	0	0%
13 Population over 80,001	4	24%	10	59%	1	6%	2	12%	0	0%

AGENCY WORKFORCE

7.10.2. Staffing Positions:

Nutritionists

Highest Educational Level of **Full-Time** Nutritionists

	Master's		Baccalaureate with Nutrition Emphasis		Baccalaureate		Associate		High School Diploma	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	9	18%	36	73%	3	6%	1	2%	0	0%
56 Population up to 20,000	1	11%	6	67%	2	22%	0	0%	0	0%
29 Population between 20,001 and 40,000	1	9%	10	91%	0	0%	0	0%	0	0%
16 Population between 40,001 and 80,000	3	21%	11	79%	0	0%	0	0%	0	0%
13 Population over 80,001	4	27%	9	60%	1	7%	1	7%	0	0%

AGENCY WORKFORCE

7.10.2. Staffing Positions:

Nutritionists

Highest Educational Level of **Part-Time** Nutritionists

	Master's		Baccalaureate with Nutrition Emphasis		Baccalaureate		Associate		High School Diploma	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	4	8%	33	69%	7	15%	3	6%	1	2%
56 Population up to 20,000	3	9%	24	73%	4	12%	2	6%	0	0%
29 Population between 20,001 and 40,000	1	9%	6	55%	3	27%	0	0%	1	9%
16 Population between 40,001 and 80,000	0	0%	2	100%	0	0%	0	0%	0	0%
13 Population over 80,001	0	0%	1	50%	0	0%	1	50%	0	0%

AGENCY WORKFORCE

7.10.3. Staffing Positions:

Nutritionists

Annual salary of full-time nutritionists.

	\$40,000- 54,999		\$30,000- 39,999		\$20,000- 29,999	
	Number	Percent	Number	Percent	Number	Percent
114 Statewide	4	10%	17	43%	19	48%
56 Population up to 20,000	0	0%	3	33%	6	67%
29 Population between 20,001 and 40,000	0	0%	5	45%	6	55%
16 Population between 40,001 and 80,000	1	10%	4	40%	5	50%
13 Population over 80,001	3	30%	5	50%	2	20%

Note: Percentages based on 40 agencies that have full-time nutritionists.

AGENCY WORKFORCE

7.11.1. Staffing Positions:

Dietitians

There are Dietitians on staff.

	Total Agencies	
	Number	Percent
114 Statewide	26	23%
56 Population up to 20,000	7	13%
29 Population between 20,001 and 40,000	7	24%
16 Population between 40,001 and 80,000	5	31%
13 Population over 80,001	7	54%

AGENCY WORKFORCE

7.11.1.1. Staffing Positions:

Dietitians

	Total Dietitians		Full-Time Dietitians		Part-Time Dietitians	
	Number	Percent*	Number	Percent	Number	Percent
114 Statewide	33	1%	23	70%	10	30%
56 Population up to 20,000	8	1%	4	50%	4	50%
29 Population between 20,001 and 40,000	8	2%	5	63%	3	38%
16 Population between 40,001 and 80,000	7	2%	6	86%	1	14%
13 Population over 80,001	10	1%	8	80%	2	20%

*Percent of total Workforce

AGENCY WORKFORCE

7.11.2. Staffing Positions:

Dietitians

Highest Educational Level of All Dietitians

	Master's		Baccalaureate		Associate	
	Number	Percent	Number	Percent	Number	Percent
114 Statewide	8	24%	22	67%	3	9%
56 Population up to 20,000	3	38%	4	50%	1	13%
29 Population between 20,001 and 40,000	1	13%	6	75%	1	13%
16 Population between 40,001 and 80,000	0	0%	7	100%	0	0%
13 Population over 80,001	4	40%	5	50%	1	10%

AGENCY WORKFORCE

7.11.2. Staffing Positions:

Dietitians

Highest Educational Level of Full-Time Dietitians

	Master's		Baccalaureate		Associate	
	Number	Percent	Number	Percent	Number	Percent
114 Statewide	8	35%	15	65%	0	0%
56 Population up to 20,000	3	75%	1	25%	0	0%
29 Population between 20,001 and 40,000	1	20%	4	80%	0	0%
16 Population between 40,001 and 80,000	0	0%	6	100%	0	0%
13 Population over 80,001	4	50%	4	50%	0	0%

AGENCY WORKFORCE

7.11.2. Staffing Positions:

Dietitians

Highest Educational Level of **Part-Time** Dietitians

	Master's		Baccalaureate		Associate	
	Number	Percent	Number	Percent	Number	Percent
114 Statewide	0	0%	7	70%	3	30%
56 Population up to 20,000	0	0%	3	75%	1	25%
29 Population between 20,001 and 40,000	0	0%	2	67%	1	33%
16 Population between 40,001 and 80,000	0	0%	1	100%	0	0%
13 Population over 80,001	0	0%	1	50%	1	50%

AGENCY WORKFORCE

7.11.3. Staffing Positions:

Dietitians

Annual salary of full-time dietitians.

	\$40,000- 54,999		\$30,000- 39,999		\$20,000- 29,999	
	Number	Percent	Number	Percent	Number	Percent
114 Statewide	2	13%	11	69%	3	19%
56 Population up to 20,000	1	33%	2	67%	0	0%
29 Population between 20,001 and 40,000	0	0%	3	75%	1	25%
16 Population between 40,001 and 80,000	0	0%	3	75%	1	25%
13 Population over 80,001	1	20%	3	60%	1	20%

Note: Percentages based on 16 agencies that have full-time dietitians.

AGENCY WORKFORCE

7.11.4. Staffing Positions:

Dietitians

Number of registered dietitians.

	Number	Percent
114 Statewide	23	70%
56 Population up to 20,000	2	25%
29 Population between 20,001 and 40,000	6	75%
16 Population between 40,001 and 80,000	7	100%
13 Population over 80,001	8	80%

AGENCY WORKFORCE

7.12.1. Staffing Positions:

There are Health Educators on staff.

	Total Agencies	
	Number	Percent
114 Statewide	44	39%
56 Population up to 20,000	17	30%
29 Population between 20,001 and 40,000	13	45%
16 Population between 40,001 and 80,000	6	38%
13 Population over 80,001	8	62%

AGENCY WORKFORCE

7.12.1.1. Staffing Positions:

Health Educators

	Total Health Educators		Full-Time Health Educators		Part-Time Health Educators	
	Number	Percent*	Number	Percent	Number	Percent
114 Statewide	79	3%	54	68%	25	32%
56 Population up to 20,000	21	3%	9	43%	12	57%
29 Population between 20,001 and 40,000	14	3%	7	50%	7	50%
16 Population between 40,001 and 80,000	10	3%	9	90%	1	10%
13 Population over 80,001	34	2%	29	85%	5	15%

*Percent of total Workforce

AGENCY WORKFORCE

7.12.2. Staffing Positions:

Health Educators

Highest Educational Level of All Health Educators

	Doctorate		Master's		Baccalaureate with Health Educ. Emphasis		Baccalaureate		Associate	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	1	1%	20	25%	25	32%	24	30%	9	11%
56 Population up to 20,000	0	0%	1	5%	7	33%	5	24%	8	38%
29 Population between 20,001 and 40,000	0	0%	1	7%	4	29%	9	64%	0	0%
16 Population between 40,001 and 80,000	0	0%	1	10%	5	50%	4	40%	0	0%
13 Population over 80,001	1	3%	17	50%	9	26%	6	18%	1	3%

AGENCY WORKFORCE

7.12.2. Staffing Positions:

Health Educators

Highest Educational Level of Full-Time Health Educators

	Doctorate		Master's		Baccalaureate with Health Educ. Emphasis		Baccalaureate		Associate	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	1	2%	17	31%	19	35%	13	24%	4	7%
56 Population up to 20,000	0	0%	1	11%	4	44%	1	11%	3	33%
29 Population between 20,001 and 40,000	0	0%	0	0%	2	29%	5	71%	0	0%
16 Population between 40,001 and 80,000	0	0%	1	11%	5	56%	3	33%	0	0%
13 Population over 80,001	1	3%	15	52%	8	28%	4	14%	1	3%

AGENCY WORKFORCE

7.12.2. Staffing Positions:

Health Educators

Highest Educational Level of **Part-Time** Health Educators

	Doctorate		Master's		Baccalaureate with Health Educ. Emphasis		Baccalaureate		Associate	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	0	0%	3	12%	6	24%	11	44%	5	20%
56 Population up to 20,000	0	0%	0	0%	3	25%	4	33%	5	42%
29 Population between 20,001 and 40,000	0	0%	1	14%	2	29%	4	57%	0	0%
16 Population between 40,001 and 80,000	0	0%	0	0%	0	0%	1	100%	0	0%
13 Population over 80,001	0	0%	2	40%	1	20%	2	40%	0	0%

AGENCY WORKFORCE

7.12.3. Staffing Positions:

Health Educators

Annual salary of full-time health educators.

	\$40,000- 54,999		\$30,000- 39,999		\$20,000- 29,999	
	Number	Percent	Number	Percent	Number	Percent
114 Statewide	5	19%	7	26%	15	56%
56 Population up to 20,000	1	11%	1	11%	7	78%
29 Population between 20,001 and 40,000	0	0%	1	17%	5	83%
16 Population between 40,001 and 80,000	0	0%	2	40%	3	60%
13 Population over 80,001	4	57%	3	43%	0	0%

Note: Percentages based on 27 agencies that have full-time health educators.

AGENCY WORKFORCE

7.12.4. Staffing Positions:

Number of Health Educators CHES certified.

	Total Health Educators	
	Number	Percent
114 Statewide	10	13%
56 Population up to 20,000	3	14%
29 Population between 20,001 and 40,000	2	14%
16 Population between 40,001 and 80,000	0	0%
13 Population over 80,001	5	15%

AGENCY WORKFORCE

7.13.1. Staffing Positions:

Social Workers

There are Social Workers on staff.

	Total Agencies	
	Number	Percent
114 Statewide	20	18%
56 Population up to 20,000	4	7%
29 Population between 20,001 and 40,000	3	10%
16 Population between 40,001 and 80,000	6	38%
13 Population over 80,001	7	54%

AGENCY WORKFORCE

7.13.1.1. Staffing Positions:

Social Workers

	Total Social Workers		Full-Time Social Workers		Part-Time Social Workers	
	Number	Percent*	Number	Percent	Number	Percent
114 Statewide	38	1%	27	71%	11	29%
56 Population up to 20,000	5	1%	4	80%	1	20%
29 Population between 20,001 and 40,000	3	1%	1	33%	2	67%
16 Population between 40,001 and 80,000	7	2%	4	57%	3	43%
13 Population over 80,001	23	2%	18	78%	5	22%

*Percent of total Workforce

AGENCY WORKFORCE

7.13.2. Staffing Positions:

Social Workers

Highest Educational Level of All Social Workers

	Doctorate		Master's		Baccalaureate		Associate		High School Diploma	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	1	3%	16	42%	14	37%	3	8%	4	11%
56 Population up to 20,000	0	0%	1	20%	4	80%	0	0%	0	0%
29 Population between 20,001 and 40,000	0	0%	2	67%	1	33%	0	0%	0	0%
16 Population between 40,001 and 80,000	0	0%	2	29%	5	71%	0	0%	0	0%
13 Population over 80,001	1	4%	11	48%	4	17%	3	13%	4	17%

AGENCY WORKFORCE

7.13.2. Staffing Positions:

Social Workers

Highest Educational Level of Full-Time Social Workers

	Doctorate		Master's		Baccalaureate		Associate		High School Diploma	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	0	0%	14	52%	10	37%	1	4%	2	7%
56 Population up to 20,000	0	0%	1	25%	3	75%	0	0%	0	0%
29 Population between 20,001 and 40,000	0	0%	1	100%	0	0%	0	0%	0	0%
16 Population between 40,001 and 80,000	0	0%	1	25%	3	75%	0	0%	0	0%
13 Population over 80,001	0	0%	11	61%	4	22%	1	6%	2	11%

AGENCY WORKFORCE

7.13.2. Staffing Positions:

Social Workers

Highest Educational Level of Part-Time Social Workers

	Doctorate		Master's		Baccalaureate		Associate		High School Diploma	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	1	9%	2	18%	4	36%	2	18%	2	18%
56 Population up to 20,000	0	0%	0	0%	1	100%	0	0%	0	0%
29 Population between 20,001 and 40,000	0	0%	1	50%	1	50%	0	0%	0	0%
16 Population between 40,001 and 80,000	0	0%	1	33%	2	67%	0	0%	0	0%
13 Population over 80,001	1	20%	0	0%	0	0%	2	40%	2	40%

AGENCY WORKFORCE

7.13.3. Staffing Positions:

Social Workers

Annual salary of full-time social workers.	\$40,000- 54,999		\$30,000- 39,999		\$20,000- 29,999	
	Number	Percent	Number	Percent	Number	Percent
114 Statewide	3	20%	7	47%	5	33%
56 Population up to 20,000	1	33%	1	33%	1	33%
29 Population between 20,001 and 40,000	0	0%	1	100%	0	0%
16 Population between 40,001 and 80,000	0	0%	2	50%	2	50%
13 Population over 80,001	2	29%	3	43%	2	29%

Note: Percentages based on 15 agencies that have full-time social workers.

AGENCY WORKFORCE

7.13.4. Staffing Positions:

Social Workers

Number of licensed social workers.	Total Social Workers	
	Number	Percent
114 Statewide	19	50%
56 Population up to 20,000	1	20%
29 Population between 20,001 and 40,000	2	67%
16 Population between 40,001 and 80,000	4	57%
13 Population over 80,001	12	52%

AGENCY WORKFORCE

7.14.1. Staffing Positions:

Clerical

There are clerical on staff.	Total Agencies	
	Number	Percent
114 Statewide	113	99%
56 Population up to 20,000	55	98%
29 Population between 20,001 and 40,000	29	100%
16 Population between 40,001 and 80,000	16	100%
13 Population over 80,001	13	100%

AGENCY WORKFORCE

7.14.1.1. Staffing Positions:

Clerical

	Total Clerical Staff		Full-Time Clerical		Part-Time Clerical	
	Number	Percent*	Number	Percent	Number	Percent
114 Statewide	689	24%	607	88%	82	12%
56 Population up to 20,000	177	25%	146	82%	31	18%
29 Population between 20,001 and 40,000	133	29%	108	81%	25	19%
16 Population between 40,001 and 80,000	122	31%	104	85%	18	15%
13 Population over 80,001	257	19%	249	97%	8	3%

*Percent of total Workforce

AGENCY WORKFORCE

7.14.2. Staffing Positions:

Clerical

Highest Educational Level of **All** Clerical

	Master's		Baccalaureate		Associate		High School	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	1	0%	22	3%	69	10%	597	87%
56 Population up to 20,000	0	0%	2	1%	17	10%	158	89%
29 Population between 20,001 and 40,000	1	1%	4	3%	17	13%	111	83%
16 Population between 40,001 and 80,000	0	0%	6	5%	10	8%	106	87%
13 Population over 80,001	0	0%	10	4%	25	10%	222	86%

AGENCY WORKFORCE

7.14.2. Staffing Positions:

Clerical

Highest Educational Level of **Full-Time** Clerical

	Master's		Baccalaureate		Associate		High School	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	1	0%	16	3%	63	10%	527	87%
56 Population up to 20,000	0	0%	0	0%	17	12%	129	88%
29 Population between 20,001 and 40,000	1	1%	1	1%	12	11%	94	87%
16 Population between 40,001 and 80,000	0	0%	5	5%	9	9%	90	87%
13 Population over 80,001	0	0%	10	4%	25	10%	214	86%

AGENCY WORKFORCE

7.14.2. Staffing Positions:

Highest Educational Level of **Part-Time** Clerical

	Master's		Baccalaureate		Associate		High School	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	0	0%	6	7%	6	7%	70	85%
56 Population up to 20,000	0	0%	2	6%	0	0%	29	94%
29 Population between 20,001 and 40,000	0	0%	3	12%	5	20%	17	68%
16 Population between 40,001 and 80,000	0	0%	1	6%	1	6%	16	89%
13 Population over 80,001	0	0%	0	0%	0	0%	8	100%

AGENCY WORKFORCE

7.14.3. Staffing Positions:

Clerical

Annual salary of full-time clerical.

	\$30,000- 39,999		\$20,000- 29,999		\$0- \$19,999	
	Number	Percent	Number	Percent	Number	Percent
114 Statewide	2	2%	72	66%	35	32%
56 Population up to 20,000	0	0%	36	69%	16	31%
29 Population between 20,001 and 40,000	0	0%	15	54%	13	46%
16 Population between 40,001 and 80,000	0	0%	11	69%	5	31%
13 Population over 80,001	2	15%	10	77%	1	8%

Note: Percentages based on 109 agencies that responded to this question.

AGENCY WORKFORCE

7.15.1. Staffing Positions:

Epi Specialists (CERT)

There are epi specialists (CERT) on staff.

	Total Agencies	
	Number	Percent
114 Statewide	22	19%
56 Population up to 20,000	3	5%
29 Population between 20,001 and 40,000	3	10%
16 Population between 40,001 and 80,000	4	25%
13 Population over 80,001	12	92%

AGENCY WORKFORCE

7.15.1.1. Staffing Positions:

Epi Specialists (CERT)

	Epi Specialists (CERT)		Full-Time Epi Specialists (CERT)	
	Number	Percent*	Number	Percent
114 Statewide	30	1%	30	100%
56 Population up to 20,000	3	0%	3	100%
29 Population between 20,001 and 40,000	3	1%	3	100%
16 Population between 40,001 and 80,000	4	1%	4	100%
13 Population over 80,001	20	1%	20	100%

*Percent of total Workforce

AGENCY WORKFORCE

7.15.2. Staffing Positions:

Epi Specialists (CERT)

Highest Educational Level of All Epi Specialists (CERT)

	Doctorate		Master's		Baccalaureate		Associate		High School Diploma	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	1	3%	14	47%	12	40%	2	7%	1	3%
56 Population up to 20,000	0	0%	0	0%	1	33%	1	33%	1	33%
29 Population between 20,001 and 40,000	0	0%	1	33%	2	67%	0	0%	0	0%
16 Population between 40,001 and 80,000	0	0%	3	75%	0	0%	1	25%	0	0%
13 Population over 80,001	1	5%	10	50%	9	45%	0	0%	0	0%

AGENCY WORKFORCE

7.15.3. Staffing Positions:

Epi Specialists (CERT)

Annual salary of full-time epi specialists (CERT)

	\$55,000-74,999		\$40,000-54,999		\$30,000-39,999		\$20,000-29,999		\$0-19,999	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	2	9%	9	41%	10	45%	0	0%	1	5%
56 Population up to 20,000	0	0%	0	0%	2	67%	0	0%	1	33%
29 Population between 20,001 and 40,000	0	0%	1	33%	2	67%	0	0%	0	0%
16 Population between 40,001 and 80,000	0	0%	4	100%	0	0%	0	0%	0	0%
13 Population over 80,001	2	17%	4	33%	6	50%	0	0%	0	0%

Note: Percentages based on 22 agencies that have full-time epi specialists (CERT).

AGENCY WORKFORCE

7.16.1. Staffing Positions:

Emergency Response Planners (CERT)

Total Agencies

There are Emergency Response Planners (CERT) on staff.

	Number	Percent
114 Statewide	32	28%
56 Population up to 20,000	4	7%
29 Population between 20,001 and 40,000	6	21%
16 Population between 40,001 and 80,000	9	56%
13 Population over 80,001	13	100%

AGENCY WORKFORCE

7.16.1.1. Staffing Positions:

Emergency Response Planners (CERT)

	Total Emergency Response Planners		Full-Time Emer. Resp. Planners (CERT)		Part-Time Emer. Resp. Planners (CERT)	
	Number	Percent*	Number	Percent	Number	Percent
114 Statewide	34	1%	30	88%	4	12%
56 Population up to 20,000	4	1%	3	75%	1	25%
29 Population between 20,001 and 40,000	7	2%	4	57%	3	43%
16 Population between 40,001 and 80,000	9	2%	9	100%	0	0%
13 Population over 80,001	14	1%	14	100%	0	0%

*Percent of total Workforce

AGENCY WORKFORCE

7.16.2. Staffing Positions:

Emergency Response Planners (CERT)

Highest Educational Level of All Emergency Response Planners (CERT)

	Master's		Baccalaureate		Associate		High School Diploma	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	10	29%	20	59%	2	6%	2	6%
56 Population up to 20,000	0	0%	2	50%	1	25%	1	25%
29 Population between 20,001 and 40,000	2	29%	3	43%	1	14%	1	14%
16 Population between 40,001 and 80,000	4	44%	5	56%	0	0%	0	0%
13 Population over 80,001	4	29%	10	71%	0	0%	0	0%

AGENCY WORKFORCE

7.16.2. Staffing Positions:

Emergency Response Planners (CERT)

Highest Educational Level of Full-Time Emergency Response Planners (CERT)

	Master's		Baccalaureate		Associate		High School Diploma	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	9	30%	18	60%	1	3%	2	7%
56 Population up to 20,000	0	0%	1	33%	1	33%	1	33%
29 Population between 20,001 and 40,000	1	25%	2	50%	0	0%	1	25%
16 Population between 40,001 and 80,000	4	44%	5	56%	0	0%	0	0%
13 Population over 80,001	4	29%	10	71%	0	0%	0	0%

AGENCY WORKFORCE

7.16.2. Staffing Positions:

Emergency Response Planners (CERT)

Highest Educational Level of **Part-Time** Emergency

Response Planners (CERT)

	Master's		Baccalaureate		Associate		High School Diploma	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	1	25%	2	50%	1	25%	0	0%
56 Population up to 20,000	0	0%	1	100%	0	0%	0	0%
29 Population between 20,001 and 40,000	1	33%	1	33%	1	33%	0	0%
16 Population between 40,001 and 80,000	0	0%	0	0%	0	0%	0	0%
13 Population over 80,001	0	0%	0	0%	0	0%	0	0%

AGENCY WORKFORCE

7.16.3. Staffing Positions:

Emergency Response Planners (CERT)

Annual salary of full-time emergency response planners

(CERT)

	\$55,000-74,999		\$40,000-54,999		\$30,000-39,999	
	Number	Percent	Number	Percent	Number	Percent
114 Statewide	1	3%	20	69%	8	28%
56 Population up to 20,000	0	0%	2	67%	1	33%
29 Population between 20,001 and 40,000	0	0%	2	50%	2	50%
16 Population between 40,001 and 80,000	0	0%	7	78%	2	22%
13 Population over 80,001	1	8%	9	69%	3	23%

Note: Percentages based on 29 agencies that have full-time emergency response planners (CERT)

AGENCY WORKFORCE

7.17.1. Staffing Positions:

Physicians

There are physicians on staff.

	Total Agencies	
	Number	Percent
114 Statewide	10	9%
56 Population up to 20,000	2	4%
29 Population between 20,001 and 40,000	1	3%
16 Population between 40,001 and 80,000	3	19%
13 Population over 80,001	4	31%

AGENCY WORKFORCE

7.17.1.1. Staffing Positions:

Physicians

	Total Physicians (On Staff)		Full-Time Paid Physicians		Part-Time Paid Physicians	
	Number	Percent*	Number	Percent	Number	Percent
114 Statewide	12	0%	3	25%	9	75%
56 Population up to 20,000	2	0%	0	0%	2	100%
29 Population between 20,001 and 40,000	2	0%	0	0%	2	100%
16 Population between 40,001 and 80,000	4	1%	0	0%	4	100%
13 Population over 80,001	4	0%	3	75%	1	25%

*Percent of total Workforce

AGENCY WORKFORCE

7.17.1.3. Staffing Positions:

Physicians

	Non-Staff Physicians	Retainer Physicians		Volunteer Physicians	
	Number	Number	Percent	Number	Percent
114 Statewide	120	75	63%	45	38%
56 Population up to 20,000	38	17	45%	21	55%
29 Population between 20,001 and 40,000	24	15	63%	9	38%
16 Population between 40,001 and 80,000	23	14	61%	9	39%
13 Population over 80,001	35	29	83%	6	17%

AGENCY WORKFORCE

7.17.2. Staffing Positions:

Dentists

There are dentists on staff.

	Total Agencies	
	Number	Percent
114 Statewide	4	4%
56 Population up to 20,000	0	0%
29 Population between 20,001 and 40,000	1	3%
16 Population between 40,001 and 80,000	1	6%
13 Population over 80,001	2	15%

AGENCY WORKFORCE

7.17.2.1. Staffing Positions:

Dentists

	Total Dentists (On Staff)		Full-Time Paid Dentists		Part-Time Paid Dentists	
	Number	Percent*	Number	Percent	Number	Percent
114 Statewide	4	0%	3	75%	1	25%
56 Population up to 20,000	0	0%	0	0%	0	0%
29 Population between 20,001 and 40,000	1	0%	0	0%	1	100%
16 Population between 40,001 and 80,000	1	0%	1	100%	0	0%
13 Population over 80,001	2	0%	2	100%	0	0%

*Percent of total Workforce

AGENCY WORKFORCE

7.17.2.3. Staffing Positions:

Dentists

	Non-Staff Dentists	Retainer Dentists		Volunteer Dentists	
	Number	Number	Percent	Number	Percent
114 Statewide	17	6	35%	11	65%
56 Population up to 20,000	4	0	0%	4	100%
29 Population between 20,001 and 40,000	0	0	0%	0	0%
16 Population between 40,001 and 80,000	5	0	0%	5	100%
13 Population over 80,001	8	6	75%	2	25%

AGENCY WORKFORCE

7.18.1. Staffing Positions:

Other

There are others on staff.

	Total Agencies	
	Number	Percent
114 Statewide	52	46%
56 Population up to 20,000	26	46%
29 Population between 20,001 and 40,000	6	21%
16 Population between 40,001 and 80,000	11	69%
13 Population over 80,001	9	69%

AGENCY WORKFORCE**7.18.1.1. Staffing Positions:****Other**

	Total Other		Full-Time Other		Part-Time Other	
	Number	Percent*	Number	Percent	Number	Percent
114 Statewide	677	23%	555	82%	122	18%
56 Population up to 20,000	62	9%	39	63%	23	37%
29 Population between 20,001 and 40,000	54	12%	14	26%	40	74%
16 Population between 40,001 and 80,000	21	5%	14	67%	7	33%
13 Population over 80,001	540	39%	488	90%	52	10%

*Percent of total Workforce

CHAPTER 3

I. SUMMARY OF SERVICES AND PROGRAMS - 2004

Clinical Services: all local public health agencies in Missouri offer immunizations including childhood immunization and influenza and pneumonia vaccinations. Ninety-one percent (91%) of agencies offer WIC services. A majority of agencies (59%) provided family planning services during the preceding year. Forty-two percent (42%) of agencies provide breast and cervical cancer screening; and approximately 25% of agencies provide well child exams for non-Medicaid children, HCY exams for children covered by Medicaid, and prenatal care. A few local agencies (9%) offer dental sealants, and 10% offer other dental health services. A few agencies (10%) also offer primary care that meets the definition “sick and well care for people of all ages.” (See Graphs 5.1 and Data Tables 5.1)

Screening and Testing: 99% of local public health agencies test for tuberculosis. Screening or testing for hypertension, HIV, and pregnancy is performed by 90% or more of agencies. Over 80% of agencies screen for diabetes, elevated blood lead, and sexually transmitted diseases. Screening for cholesterol and hearing problems is offered by over 70% of agencies, and over 60% offer vision screening and/or conduct screenings for schools. (See Graphs 5.2 and Data Tables 5.2)

Other Services and Programs: environmental health services are reportedly provided by 113 of the 114 local public health agencies. Ninety percent (90%) or more of agencies inspect childcare facilities, refer women for prenatal care, assist clients with MC+ applications, and offer assistance for people with disability or language barriers to access care. Eighty percent (80%) or more of agencies issue Temporary Medicaid Cards for eligible pregnant women, provide nursing consultation in childcare facilities, and provide nutritional counseling. Other programs and services offered by over half of agencies (54% to 79%) include case management of children with elevated lead levels, prenatal case management, tobacco use prevention programs, women’s health programs, and cancer screening and prevention education. A number of agencies (40% to 50%) provide home visits for newborn infants, distribute child safety seats, and conduct prevention and management activities for diabetes and cardiovascular disease.

Home health services are provided by 39 agencies (34%). Four (4) fewer agencies provided home health in 2004 than did in 2003. (See Graphs 5.3 and Data Tables 5.3)

CHAPTER 3

II. VARIATION IN SERVICES AND PROGRAMS BY SIZE OF POPULATION SERVED - 2004

Clinical Services: agencies serving populations greater than 80,000 were less likely to offer family planning and WIC services than agencies serving smaller populations. Only 38% of agencies serving populations greater than 80,000 offered family planning services compared to over 60% of agencies in each of the groups that serve populations less than 80,000. Over 90% of agencies in groups that serve populations less than 80,000 provide WIC services, while only 62% of the largest agencies do so.

Agencies that serve populations between 40,001 and 80,000 are most likely (38%) provide prenatal care; 15% to 24% of agencies in groups that serve other populations sizes offer prenatal care services.

Twenty-three percent (23%) of agencies serving populations over 80,000 provide dental sealants, while only 5% to 13% of agencies serving populations fewer than 80,000 offer this service. (See Graphs 5.1 and Data Tables 5.1)

Screening and Testing: agencies that serve larger populations are less likely to offer a number of different screenings than agencies serving smaller populations. The percentage of agencies screening for hearing problems, Tuberculosis, pregnancy, HIV and diabetes is lowest for agencies serving populations greater than 80,000.

Eighty-four percent (84%) of agencies that serve populations 20,000 or fewer, and 72% of agencies that serve populations from 20,001 to 40,000 provide cholesterol screening compared to 56% of agencies that serve populations from 40,001 to 80,000, and only 46% of agencies that serve populations over 80,000.

Ninety-four percent (94%) of agencies in the group that serves populations between 40,001 and 80,000 and 96% of agencies in the group that serves populations fewer than 20,000 provide lead screening, compared to 77% of agencies that serve populations over 80,000 and 79% of agencies that serving populations between 20,001 and 40,000.

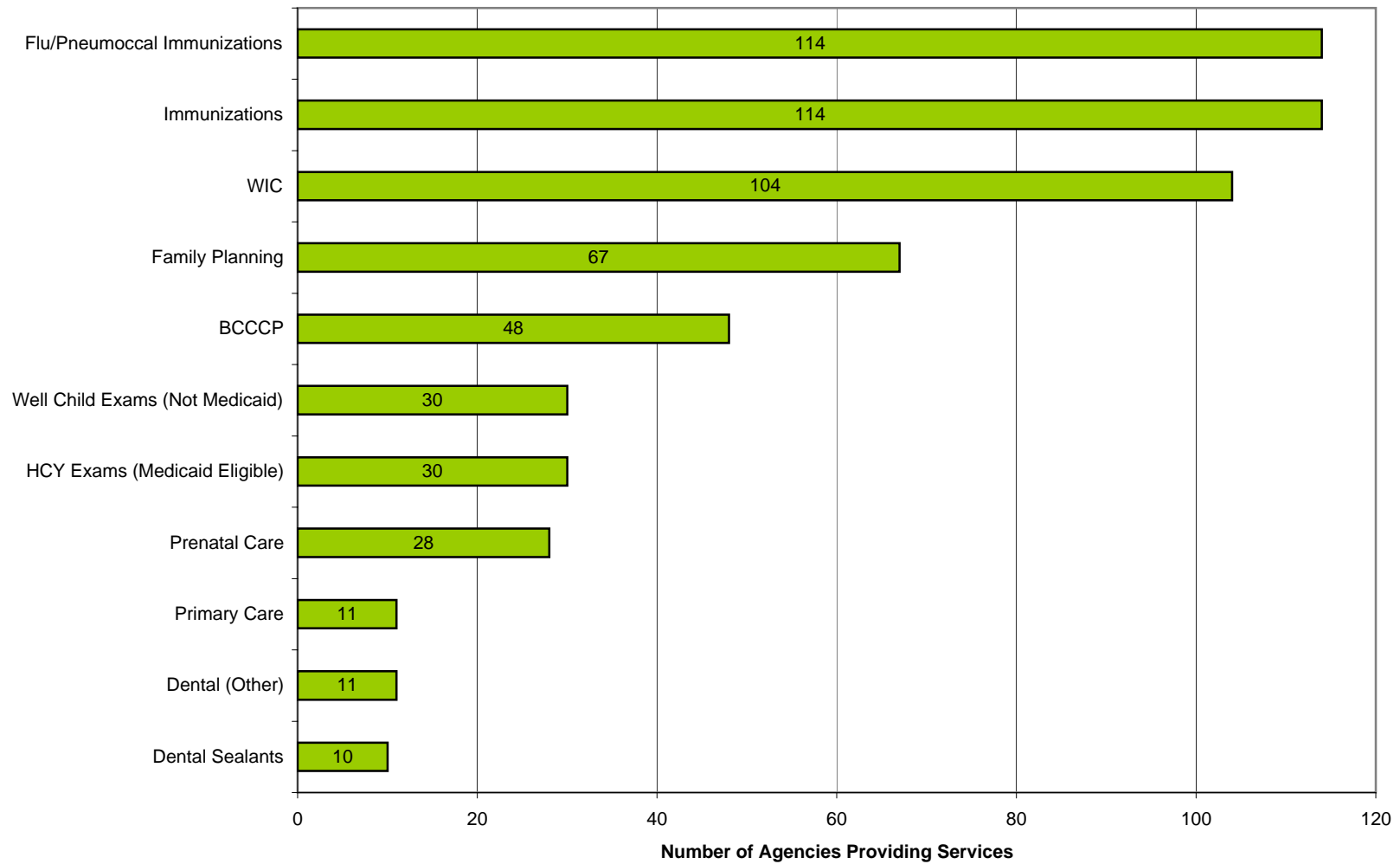
Agencies that serve populations between 20,001 and 40,000 are less likely to provide school health services than agencies in groups that serve other population sizes. (See Graphs 5.2 and Data Tables 5.2)

Other Services and Programs: home health programs are most likely to be offered by agencies serving smaller population sizes. Half (50%) of agencies serving populations 20,000 or fewer offer home health services, compared to 28% of those serving populations from 20,001 to 40,000, 19% of agencies serving populations from 40,001 to 80,000, and none of the agencies serving populations over 80,000.

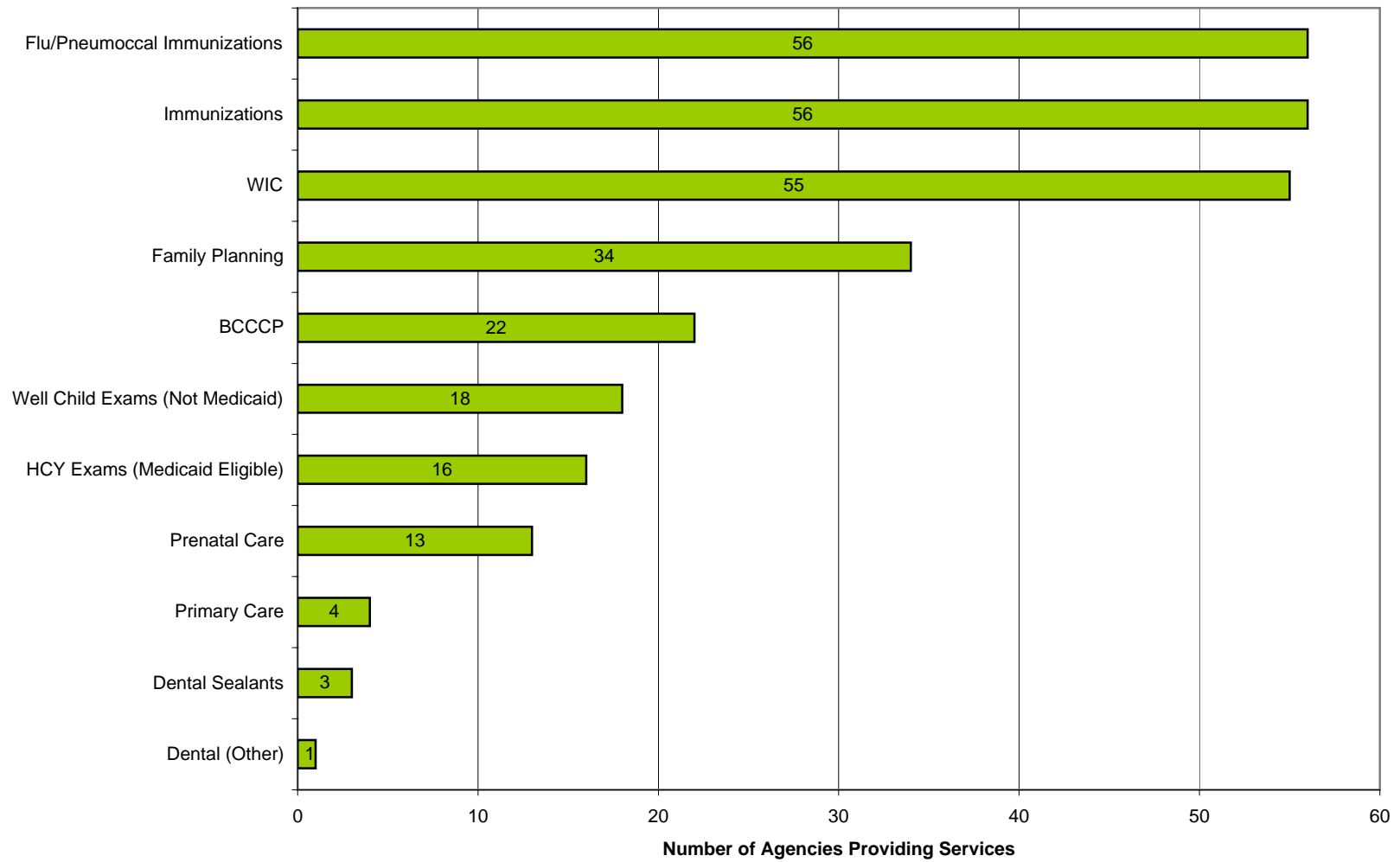
A slightly higher percentage of the smallest agencies offers newborn home visits. Seventy-five percent (75%) of agencies in the group that serves populations between 40,001 and 80,000 provide a car seat program compared to 38% to 45% of agencies in groups that serve other sizes of population. The largest agencies are less likely to provide TEMP Medicaid cards for pregnant women; 62% provide this service compared to over 90% of agencies in each of the groups that serve smaller population sizes.

Other services and programs including child care facility inspections, nurse consultation to childcare providers, prenatal case management, nutritional counseling, MC+ applications, and chronic disease prevention and education programs are provided fairly consistently regardless of agency size. (See Graphs 5.3 and Data Tables 5.3)

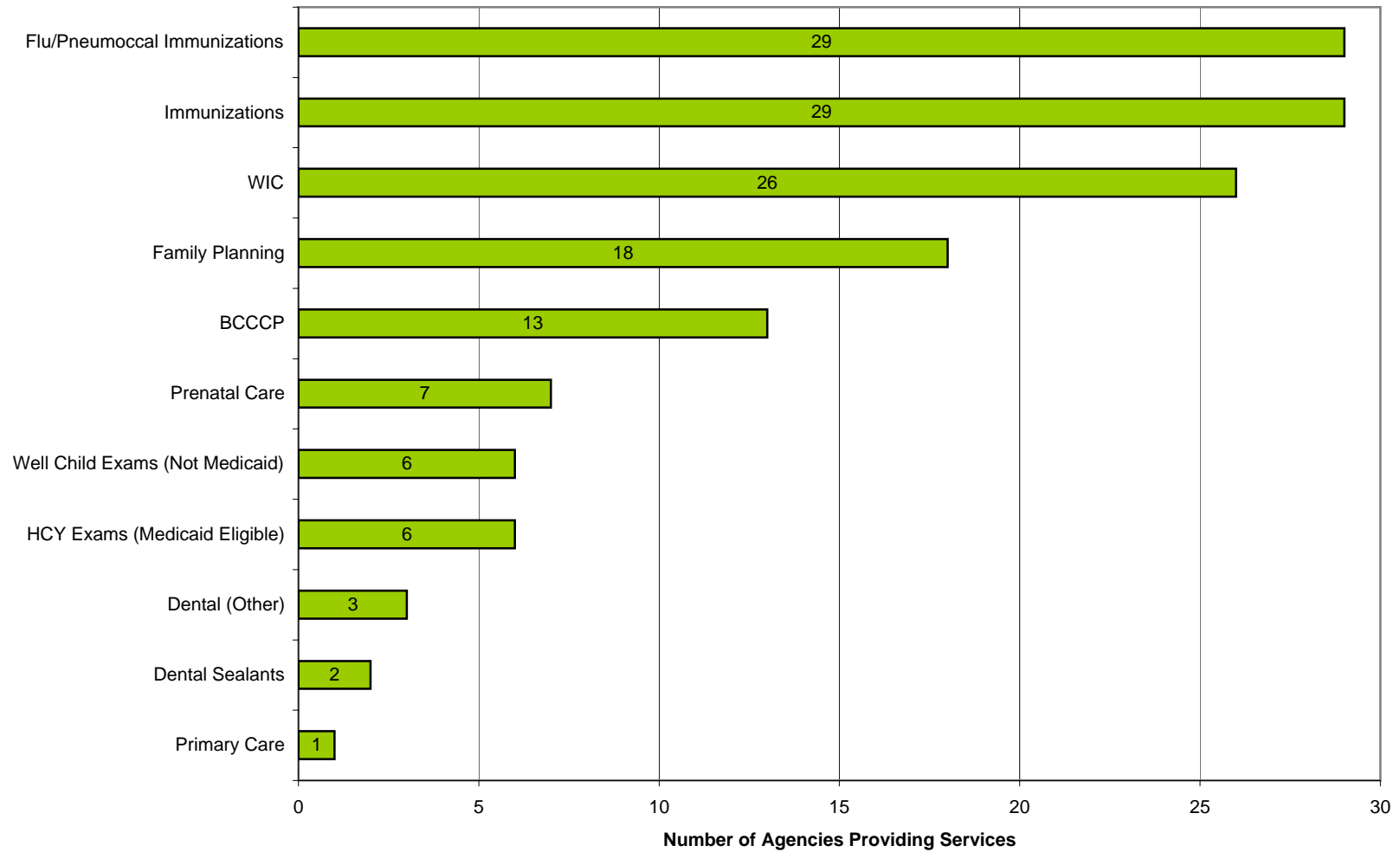
**Clinical Services Provided by Local Public Health Agencies 2004 - 5.1
Statewide (114 Agencies)**



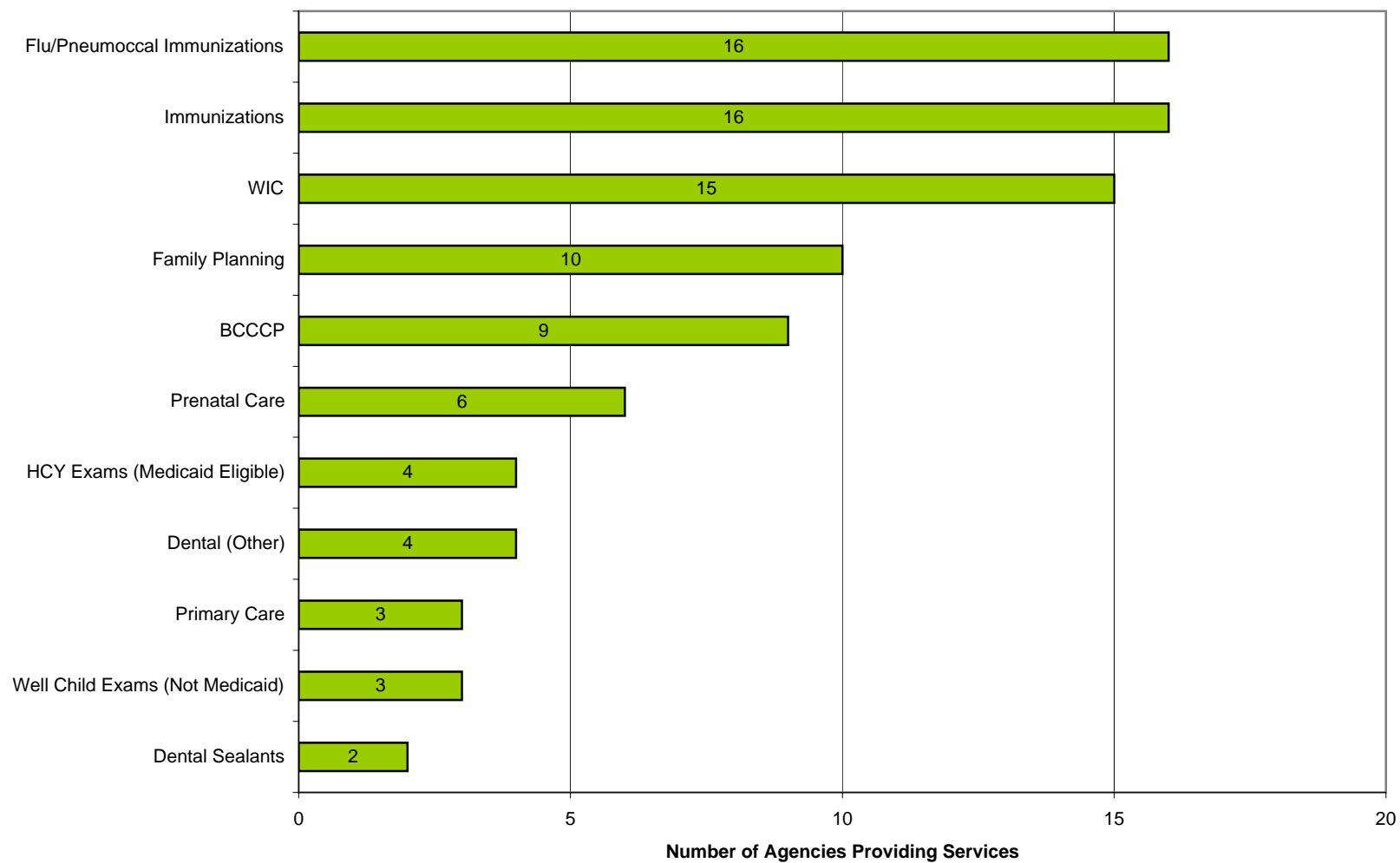
Clinical Services Provided by Local Public Health Agencies 2004 - 5.1
20,000 or Less Population (56 Agencies)



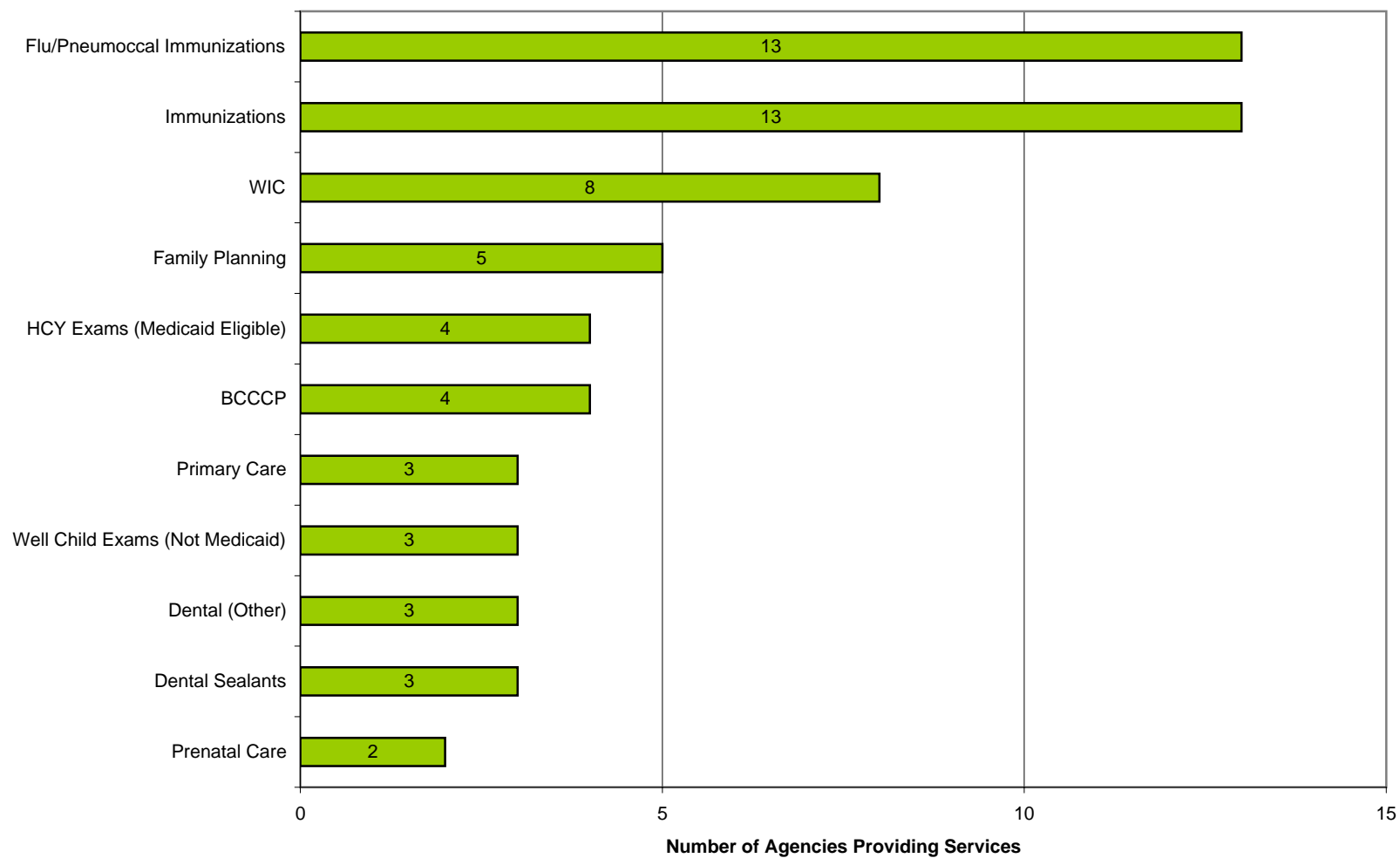
Clinical Services Provided by Local Public Health Agencies 2004 - 5.1
20,001-40,000 Population (29 Agencies)



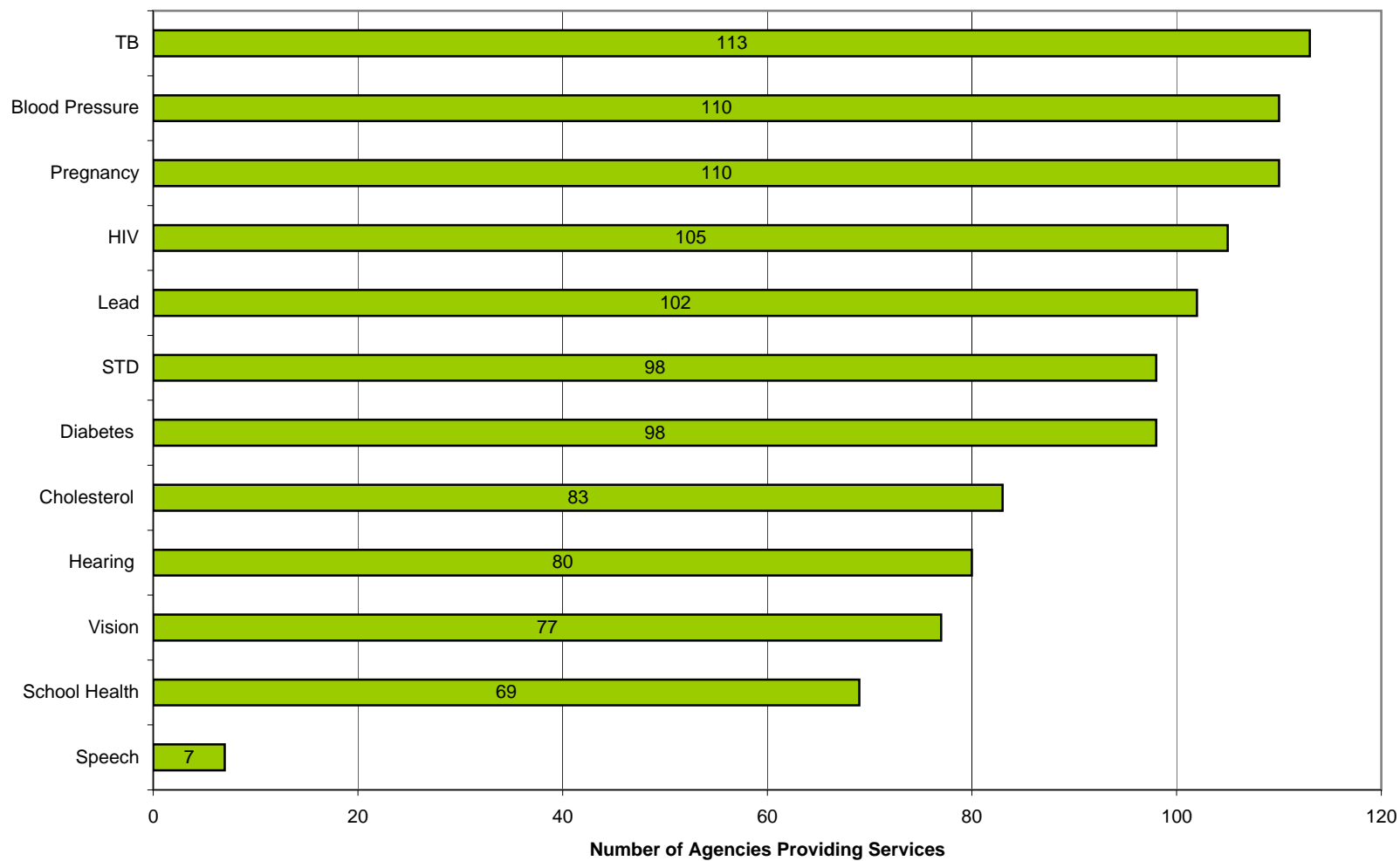
Clinical Services Provided by Local Public Health Agencies 2004 - 5.1
40,001-80,000 Population (16 Agencies)



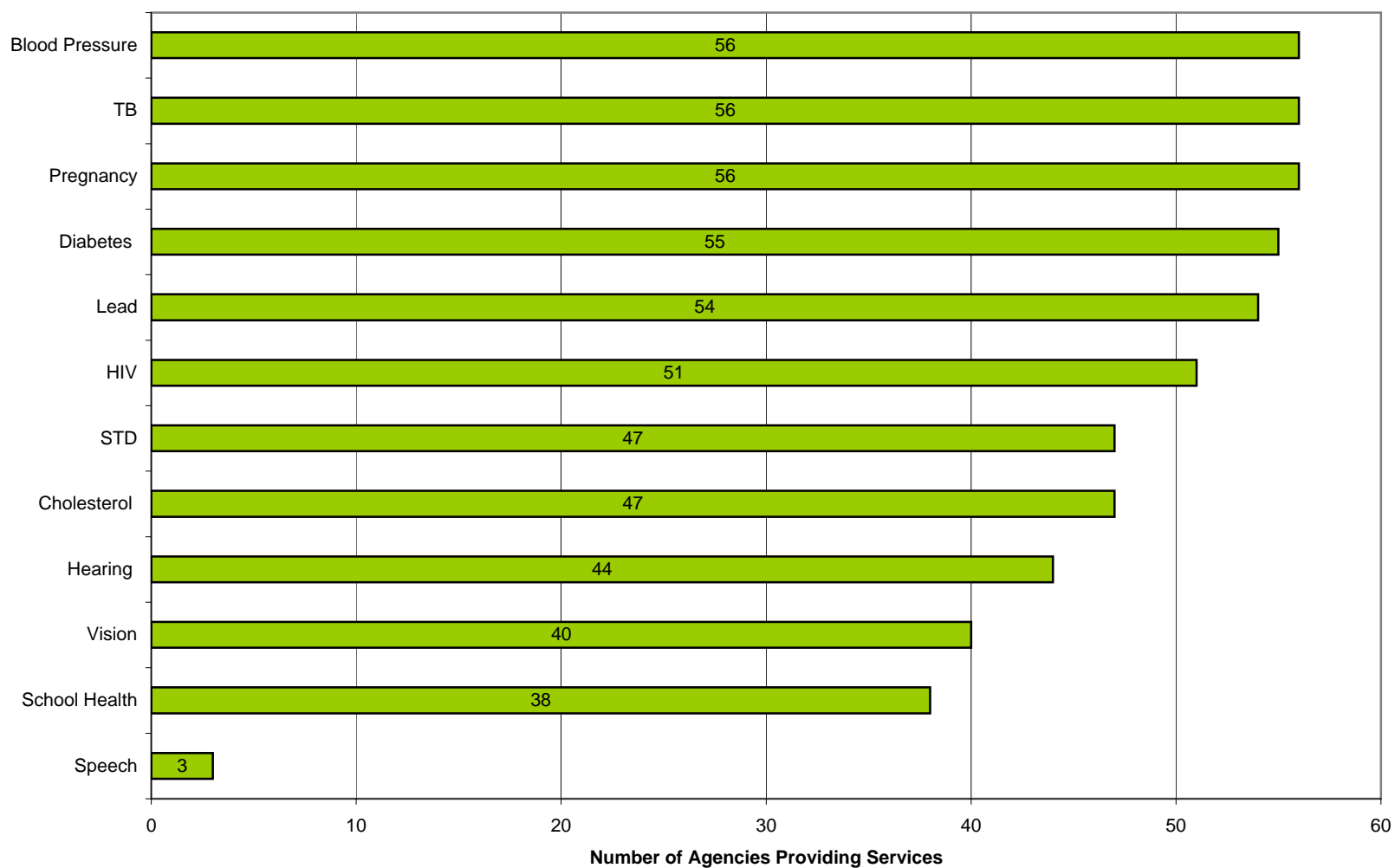
**Clinical Services Provided by Local Public Health Agencies 2004 - 5.1
Over 80,001 Population (13 Agencies)**



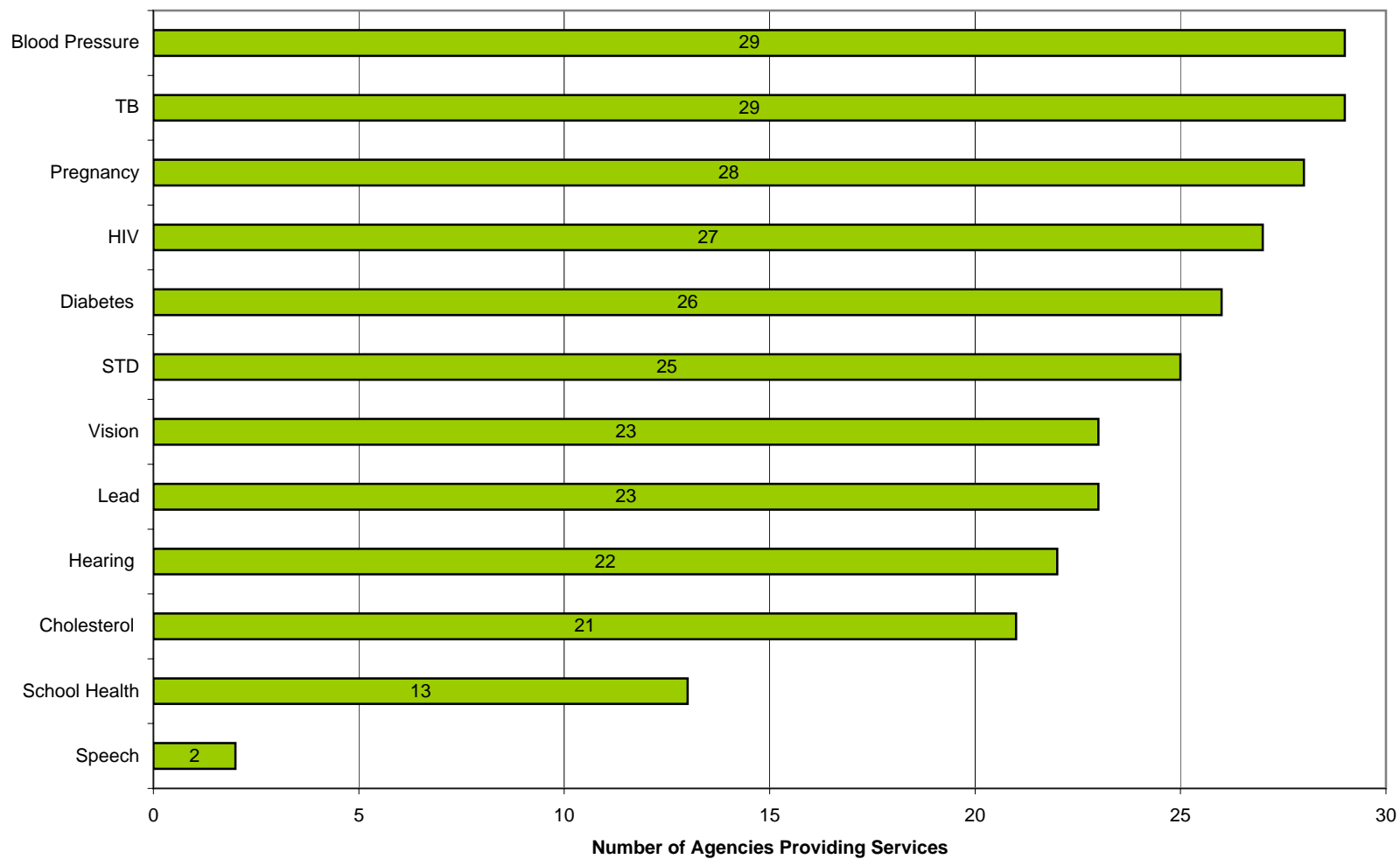
**Screening/Testing Provided by Local Public Health Agencies 2004 - 5.2
Statewide (114 Agencies)**



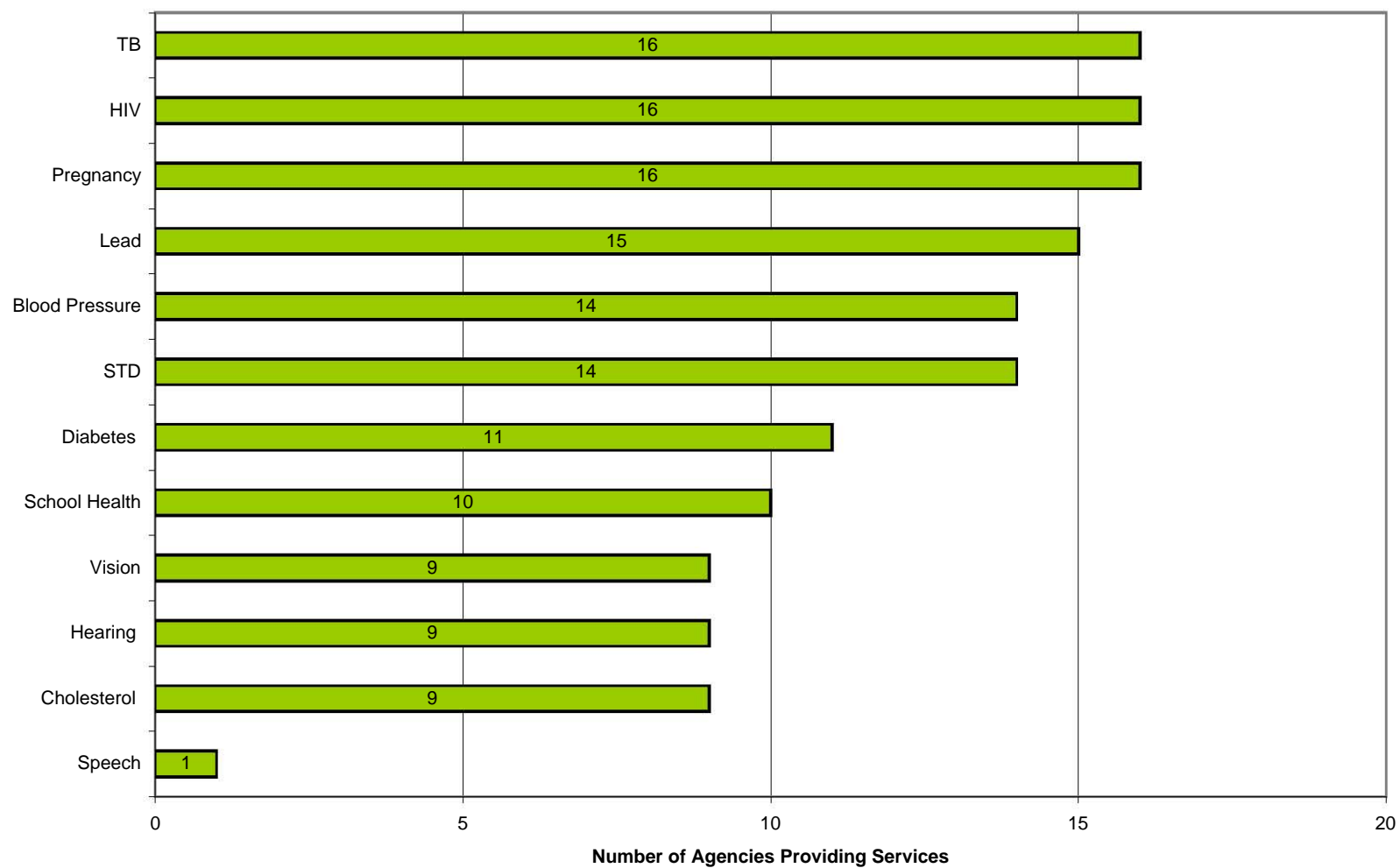
Screening/Testing Provided by Local Public Health Agencies 2004 - 5.2
20,000 or Less Population (56 Agencies)



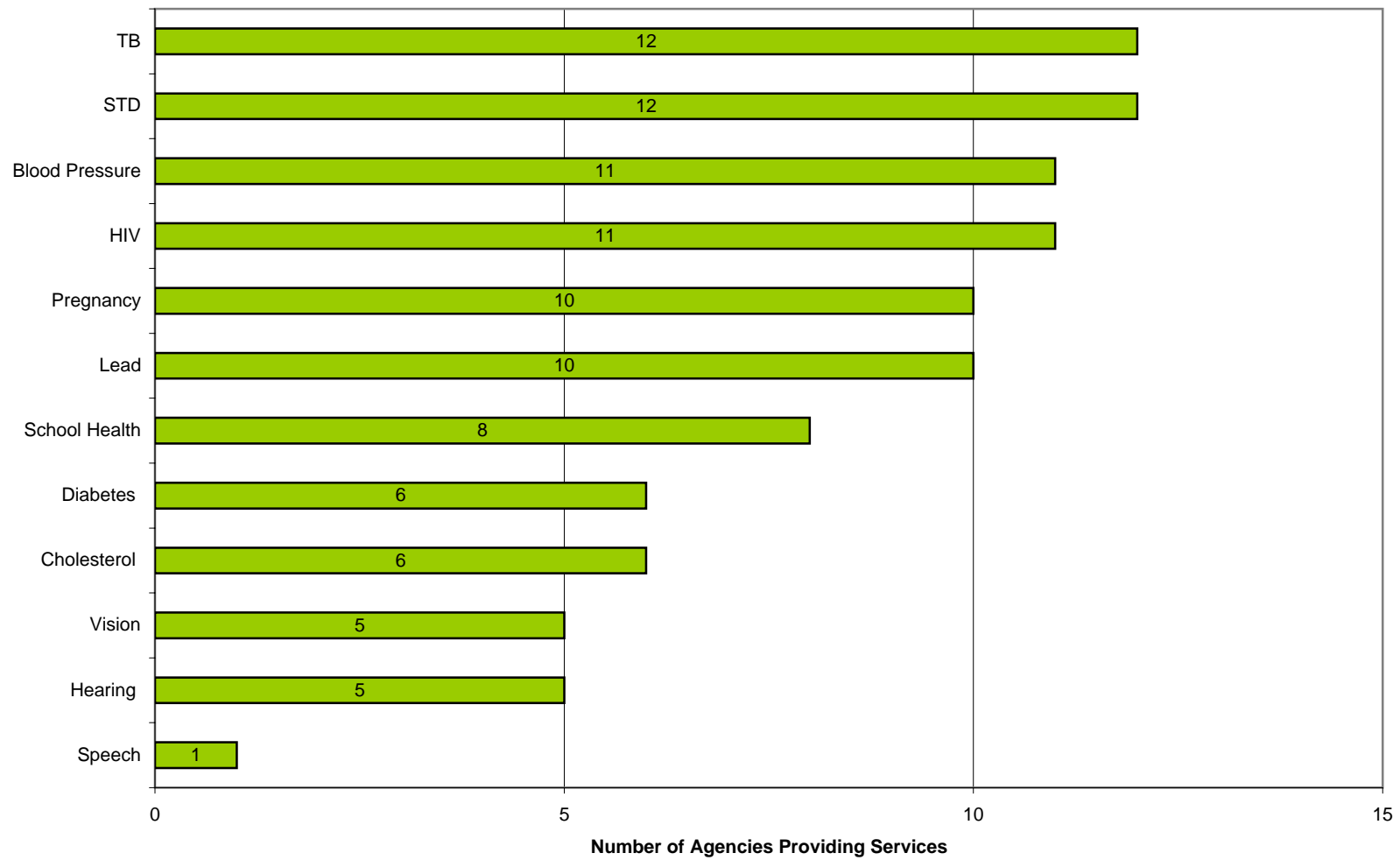
Screening/Testing Provided by Local Public Health Agencies 2004 - 5.2
20,001-40,000 Population (29 Agencies)



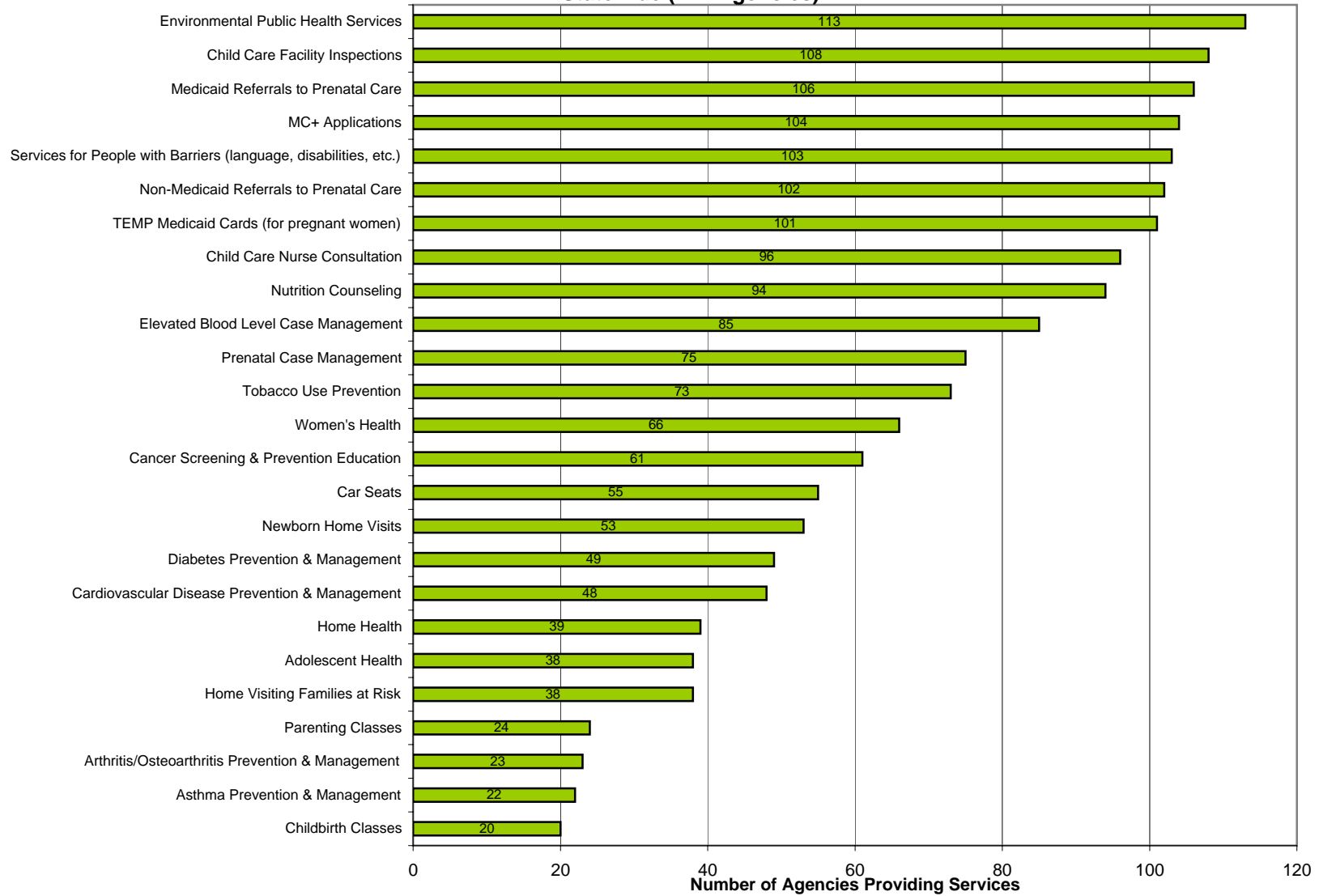
Screening/Testing Provided by Local Public Health Agencies 2004 - 5.2
40,001-80,000 Population (16 Agencies)



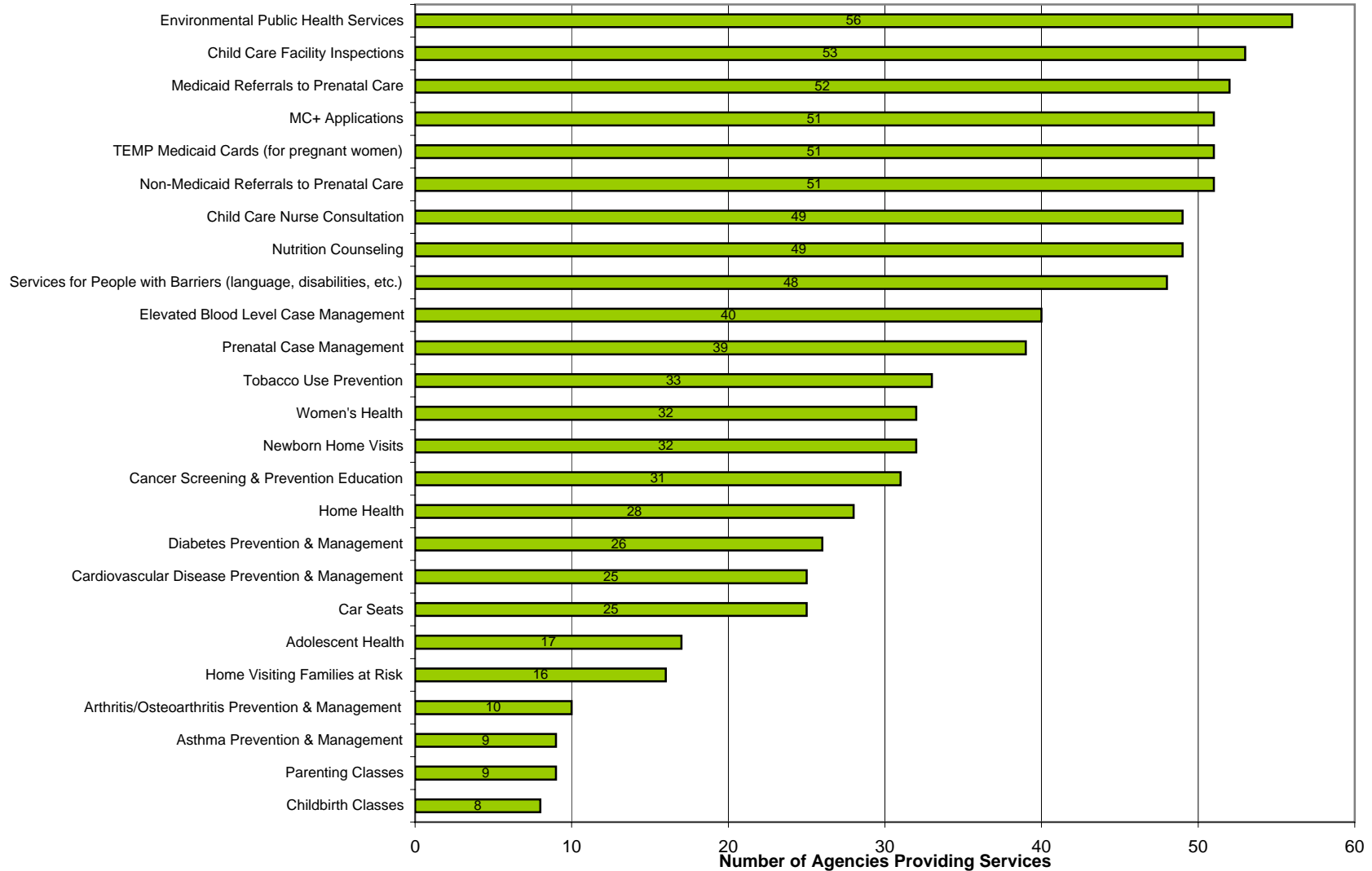
Screening/Testing Provided by Local Public Health Agencies 2004 - 5.2
Over 80,001 Population (13 Agencies)



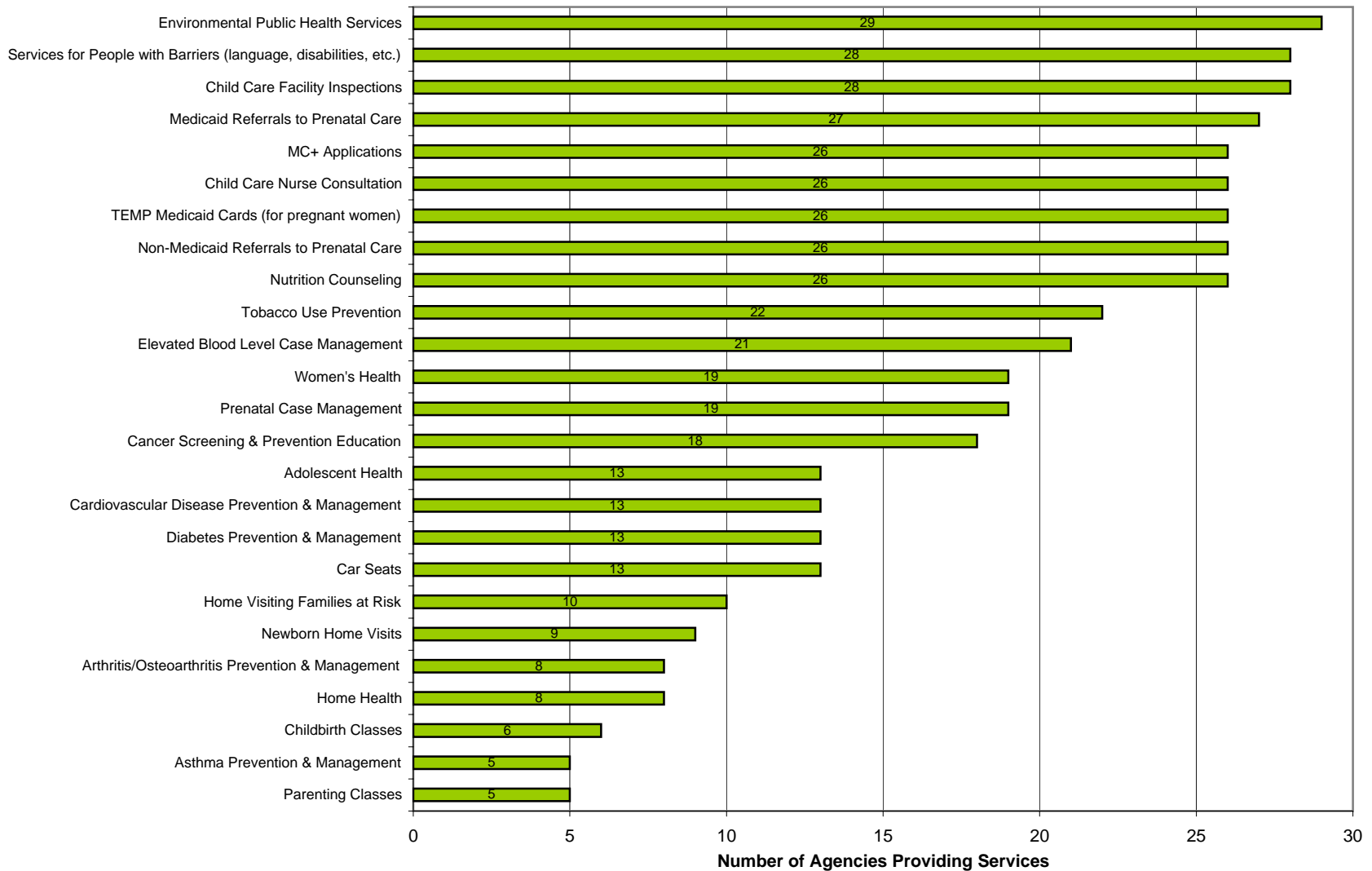
**Other Services Provided by Local Public Health Agencies 2004 - 5.3
Statewide (114 Agencies)**



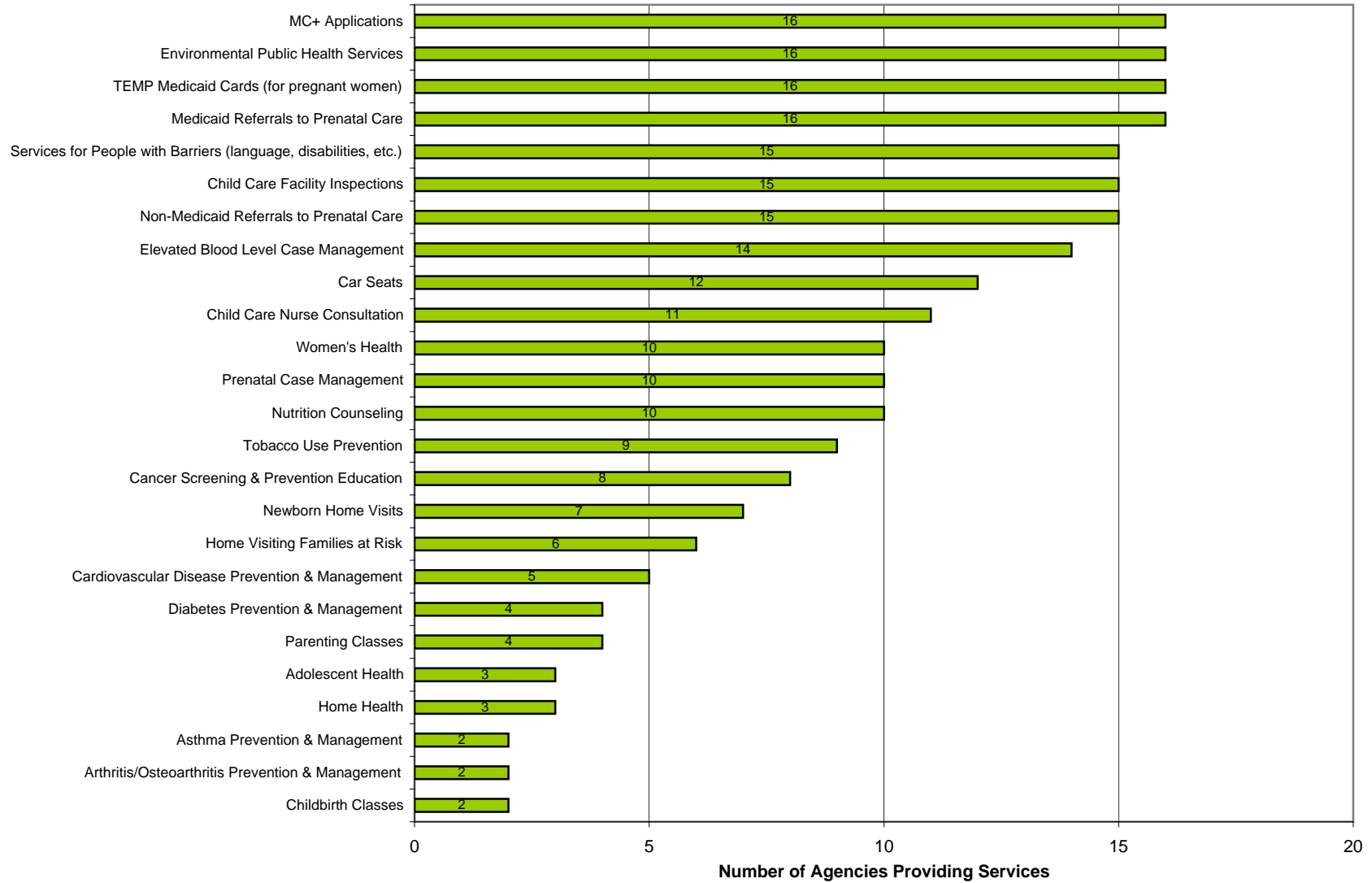
Other Services Provided by Local Public Health Agencies 2004 - 5.3
20,000 or Less Population (56 Agencies)



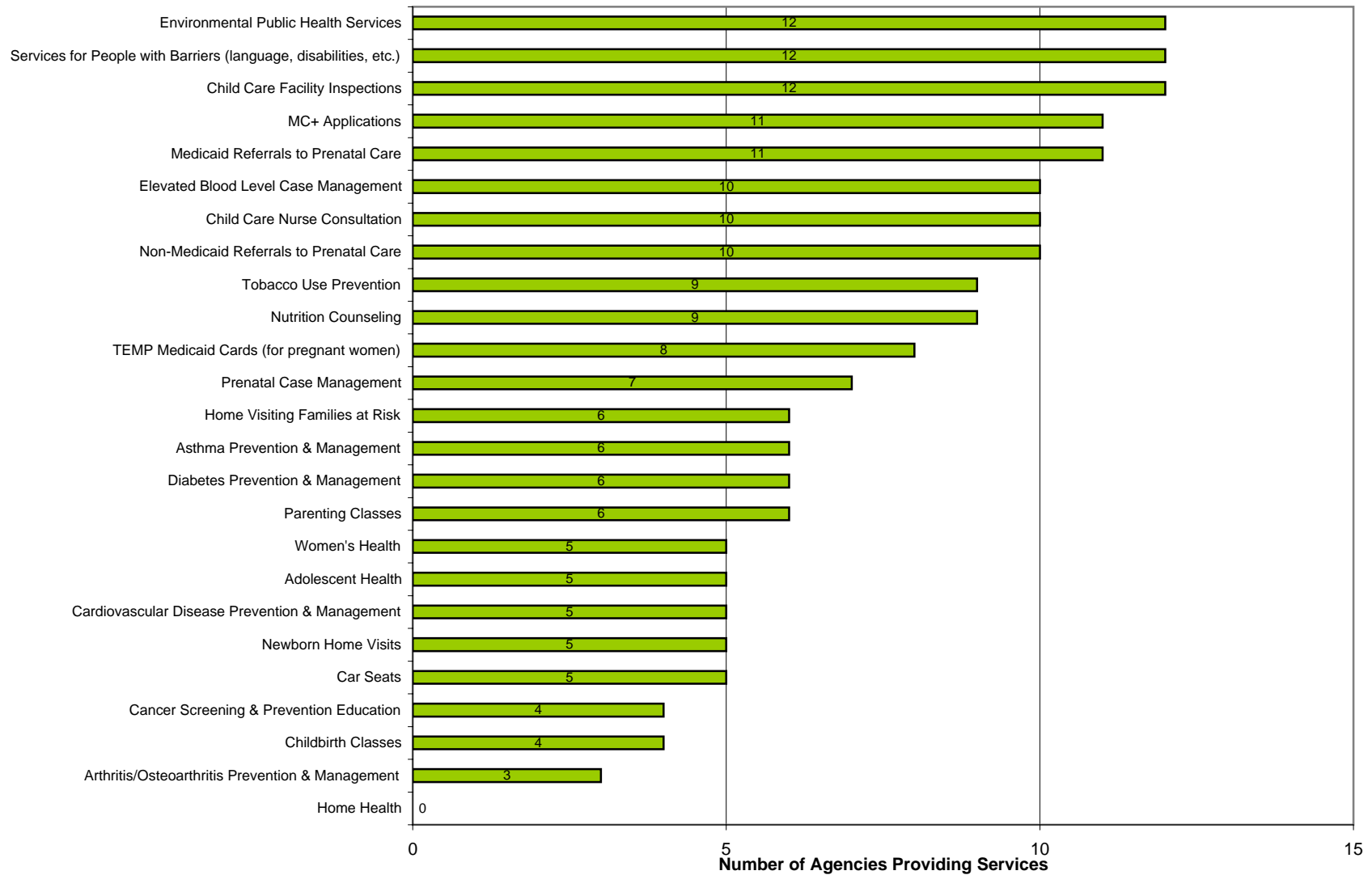
Other Services Provided by Local Public Health Agencies 2004 - 5.3
20,001-40,000 Population (29 Agencies)



Other Services Provided by Local Public Health Agencies 2004 - 5.3
40,001-80,000 Population (16 Agencies)



Other Services Provided by Local Public Health Agencies 2004 - 5.3
Over 80,001 Population (13 Agencies)



CHAPTER 3

DATA TABLES

SERVICES AND PROGRAMS

5. SERVICES AND PROGRAMS

Statewide - 114

Number Percent

5.1. Does your agency provide the following Clinical Services?

BCCCP	48	42%
Dental Sealants	10	9%
Dental (Other)	11	10%
Family Planning	67	59%
HCY Exams (Medicaid Eligible)	30	26%
Immunizations	114	100%
Flu/Pneumoccal Immunizations	114	100%
Prenatal Care	28	25%
WIC	104	91%
Well Child Exams (Not Medicaid)	30	26%
Primary Care	11	10%

SERVICES AND PROGRAMS

Up to 20,000

Population - 56

Number Percent

5.1. Does your agency provide the following Clinical Services?

BCCCP	22	39%
Dental Sealants	3	5%
Dental (Other)	1	2%
Family Planning	34	61%
HCY Exams (Medicaid Eligible)	16	29%
Immunizations	56	100%
Flu/Pneumoccal Immunizations	56	100%
Prenatal Care	13	23%
WIC	55	98%
Well Child Exams (Not Medicaid)	18	32%
Primary Care	4	7%

SERVICES AND PROGRAMS**20,001-40,000****Population - 29**

Number Percent

5.1. Does your agency provide the following**Clinical Services?**

BCCCP	13	45%
Dental Sealants	2	7%
Dental (Other)	3	10%
Family Planning	18	62%
HCY Exams (Medicaid Eligible)	6	21%
Immunizations	29	100%
Flu/Pneumoccal Immunizations	29	100%
Prenatal Care	7	24%
WIC	26	90%
Well Child Exams (Not Medicaid)	6	21%
Primary Care	1	3%

SERVICES AND PROGRAMS**40,001 - 80,000****Population - 16**

Number Percent

5.1. Does your agency provide the following**Clinical Services?**

BCCCP	9	56%
Dental Sealants	2	13%
Dental (Other)	4	25%
Family Planning	10	63%
HCY Exams (Medicaid Eligible)	4	25%
Immunizations	16	100%
Flu/Pneumoccal Immunizations	16	100%
Prenatal Care	6	38%
WIC	15	94%
Well Child Exams (Not Medicaid)	3	19%
Primary Care	3	19%

SERVICES AND PROGRAMS

Over 80,001
Population - 13
Number Percent

5.1. Does your agency provide the following
Clinical Services?

BCCCP	4	31%
Dental Sealants	3	23%
Dental (Other)	3	23%
Family Planning	5	38%
HCY Exams (Medicaid Eligible)	4	31%
Immunizations	13	100%
Flu/Pneumoccal Immunizations	13	100%
Prenatal Care	2	15%
WIC	8	62%
Well Child Exams (Not Medicaid)	3	23%
Primary Care	3	23%

SERVICES AND PROGRAMS

Statewide - 114
Number Percent

5.2. Does your agency provide the following
Screening/Testing?

Cholesterol	83	73%
Diabetes	98	86%
Hearing	80	70%
Lead	102	89%
Pregnancy	110	96%
School Health	69	61%
Speech	7	6%
Vision	77	68%
STD	98	86%
HIV	105	92%
TB	113	99%
Blood Pressure	110	96%

SERVICES AND PROGRAMS**Up to 20,000
Population - 56**
Number Percent**5.2. Does your agency provide the following
Screening/Testing?**

Cholesterol	47	84%
Diabetes	55	98%
Hearing	44	79%
Lead	54	96%
Pregnancy	56	100%
School Health	38	68%
Speech	3	5%
Vision	40	71%
STD	47	84%
HIV	51	91%
TB	56	100%
Blood Pressure	56	100%

SERVICES AND PROGRAMS**20,001-40,000
Population - 29**
Number Percent**5.2. Does your agency provide the following
Screening/Testing?**

Cholesterol	21	72%
Diabetes	26	90%
Hearing	22	76%
Lead	23	79%
Pregnancy	28	97%
School Health	13	45%
Speech	2	7%
Vision	23	79%
STD	25	86%
HIV	27	93%
TB	29	100%
Blood Pressure	29	100%

SERVICES AND PROGRAMS**40,001 - 80,000****Population - 16**

Number Percent

5.2. Does your agency provide the following**Screening/Testing?**

Cholesterol	9	56%
Diabetes	11	69%
Hearing	9	56%
Lead	15	94%
Pregnancy	16	100%
School Health	10	63%
Speech	1	6%
Vision	9	56%
STD	14	88%
HIV	16	100%
TB	16	100%
Blood Pressure	14	88%

SERVICES AND PROGRAMS**Over 80,001****Population - 13**

Number Percent

5.2. Does your agency provide the following**Screening/Testing?**

Cholesterol	6	46%
Diabetes	6	46%
Hearing	5	38%
Lead	10	77%
Pregnancy	10	77%
School Health	8	62%
Speech	1	8%
Vision	5	38%
STD	12	92%
HIV	11	85%
TB	12	92%
Blood Pressure	11	85%

SERVICES AND PROGRAMS**Statewide - 114**

	Number	Percent
5.3. Does your agency provide the following <u>Other Services</u>?		
Car Seats	55	48%
Childbirth Classes	20	18%
Home Health	39	34%
Newborn Home Visits	53	46%
Nutrition Counseling	94	82%
Parenting Classes	24	21%
Prenatal Case Management	75	66%
Medicaid Referrals to Prenatal Care	106	93%
Non-Medicaid Referrals to Prenatal Care	102	89%
TEMP Medicaid Cards (for pregnant women)	101	89%
Arthritis/Osteoarthritis Prevention & Management	23	20%
Diabetes Prevention & Management	49	43%
Cardiovascular Disease Prevention & Management	48	42%
Asthma Prevention & Management	22	19%
Cancer Screening & Prevention Education	61	54%
Home Visiting Families at Risk	38	33%
Child Care Facility Inspections	108	95%
Child Care Nurse Consultation	96	84%
Tobacco Use Prevention	73	64%
Services for People with Barriers (language, disabilities, etc.)	103	90%
Environmental Public Health Services	113	99%
Adolescent Health	38	33%
Women's Health	66	58%
MC+ Applications	104	91%
Elevated Blood Level Case Management	85	75%

SERVICES AND PROGRAMS

Up to 20,000
Population - 56
Number Percent

5.3. Does your agency provide the following Other Services?

Car Seats	25	45%
Childbirth Classes	8	14%
Home Health	28	50%
Newborn Home Visits	32	57%
Nutrition Counseling	49	88%
Parenting Classes	9	16%
Prenatal Case Management	39	70%
Medicaid Referrals to Prenatal Care	52	93%
Non-Medicaid Referrals to Prenatal Care	51	91%
TEMP Medicaid Cards (for pregnant women)	51	91%
Arthritis/Osteoarthritis Prevention & Management	10	18%
Diabetes Prevention & Management	26	46%
Cardiovascular Disease Prevention & Management	25	45%
Asthma Prevention & Management	9	16%
Cancer Screening & Prevention Education	31	55%
Home Visiting Families at Risk	16	29%
Child Care Facility Inspections	53	95%
Child Care Nurse Consultation	49	88%
Tobacco Use Prevention	33	59%
Services for People with Barriers (language, disabilities, etc.)	48	86%
Environmental Public Health Services	56	100%
Adolescent Health	17	30%
Women's Health	32	57%
MC+ Applications	51	91%
Elevated Blood Level Case Management	40	71%

SERVICES AND PROGRAMS

20,001-40,000
Population - 29
 Number Percent

5.3. Does your agency provide the following Other Services?

Car Seats	13	45%
Childbirth Classes	6	21%
Home Health	8	28%
Newborn Home Visits	9	31%
Nutrition Counseling	26	90%
Parenting Classes	5	17%
Prenatal Case Management	19	66%
Medicaid Referrals to Prenatal Care	27	93%
Non-Medicaid Referrals to Prenatal Care	26	90%
TEMP Medicaid Cards (for pregnant women)	26	90%
Arthritis/Osteoarthritis Prevention & Management	8	28%
Diabetes Prevention & Management	13	45%
Cardiovascular Disease Prevention & Management	13	45%
Asthma Prevention & Management	5	17%
Cancer Screening & Prevention Education	18	62%
Home Visiting Families at Risk	10	34%
Child Care Facility Inspections	28	97%
Child Care Nurse Consultation	26	90%
Tobacco Use Prevention	22	76%
Services for People with Barriers (language, disabilities, etc.)	28	97%
Environmental Public Health Services	29	100%
Adolescent Health	13	45%
Women's Health	19	66%
MC+ Applications	26	90%
Elevated Blood Level Case Management	21	72%

SERVICES AND PROGRAMS

40,001 - 80,000
Population - 16
 Number Percent

5.3. Does your agency provide the following Other Services?

Car Seats	12	75%
Childbirth Classes	2	13%
Home Health	3	19%
Newborn Home Visits	7	44%
Nutrition Counseling	10	63%
Parenting Classes	4	25%
Prenatal Case Management	10	63%
Medicaid Referrals to Prenatal Care	16	100%
Non-Medicaid Referrals to Prenatal Care	15	94%
TEMP Medicaid Cards (for pregnant women)	16	100%
Arthritis/Osteoarthritis Prevention & Management	2	13%
Diabetes Prevention & Management	4	25%
Cardiovascular Disease Prevention & Management	5	31%
Asthma Prevention & Management	2	13%
Cancer Screening & Prevention Education	8	50%
Home Visiting Families at Risk	6	38%
Child Care Facility Inspections	15	94%
Child Care Nurse Consultation	11	69%
Tobacco Use Prevention	9	56%
Services for People with Barriers (language, disabilities, etc.)	15	94%
Environmental Public Health Services	16	100%
Adolescent Health	3	19%
Women's Health	10	63%
MC+ Applications	16	100%
Elevated Blood Level Case Management	14	88%

SERVICES AND PROGRAMS

Over 80,000
Population - 13
 Number Percent

5.3. Does your agency provide the following Other Services?

Car Seats	5	38%
Childbirth Classes	4	31%
Home Health	0	0%
Newborn Home Visits	5	38%
Nutrition Counseling	9	69%
Parenting Classes	6	46%
Prenatal Case Management	7	54%
Medicaid Referrals to Prenatal Care	11	85%
Non-Medicaid Referrals to Prenatal Care	10	77%
TEMP Medicaid Cards (for pregnant women)	8	62%
Arthritis/Osteoarthritis Prevention & Management	3	23%
Diabetes Prevention & Management	6	46%
Cardiovascular Disease Prevention & Management	5	38%
Asthma Prevention & Management	6	46%
Cancer Screening & Prevention Education	4	31%
Home Visiting Families at Risk	6	46%
Child Care Facility Inspections	12	92%
Child Care Nurse Consultation	10	77%
Tobacco Use Prevention	9	69%
Services for People with Barriers (language, disabilities, etc.)	12	92%
Environmental Public Health Services	12	92%
Adolescent Health	5	38%
Women's Health	5	38%
MC+ Applications	11	85%
Elevated Blood Level Case Management	10	77%

CHAPTER 4

1. SUMMARY OF WEST NILE VIRUS PREVENTION ACTIVITIES - 2004

This Chapter reflects local public health agencies' activities to prevent and control West Nile Virus (WNV). The majority of agencies are very involved in public health protection activities, primarily through the use of surveillance to identify where risks are highest, and through use of education and information on how to avoid being bitten by mosquitoes. Actual intervention to reduce mosquito-breeding habitats, and/or to kill larvae and adult mosquitoes, is more likely to be done by other city or county governmental units than by local public health agencies.

Public Education: 99% of local public health agencies conduct public outreach activities promoting mosquito bite prevention strategies. Sixty-nine percent (69%) specifically target their outreach to adults over 50 years old, the segment of population at the greatest risk of serious consequences of WNV. Ninety-three percent (93%) of agencies consider themselves to be the primary source in their community for information on WNV prevention. (See Graphs 8.1 thru 8.3.3 and Data Tables 8.3.1 thru 8.3.3)

Over 96% of agencies use poster, brochures and press releases to inform the public on ways to prevent exposure to WNV. Eighty-eight percent (88%) of agencies use flyers as well, and over half (57%) also do presentations and participate in media interviews to share health protection information. (See Graph 8.4 and Data Table 8.4)

Surveillance: 74% of local public health agencies submit dead birds for WNV testing, but only 20% collect adult mosquitoes or larvae for testing. Approximately one-third (33%) of agencies plot testing results on a map in order to visually demonstrate the geographic areas affected. (See Graph 8.5.1, 8.5.2 & 8.5.5 and Data Tables 8.5.1, 8.5.2 & 8.5.5)

Response to Public: 58% of agencies respond to citizen reports of large numbers of mosquitoes; 29% actually assess mosquito-breeding habitat. Only 12% of agencies enforce ordinances related to breeding habitats or call upon law enforcement to assist in eliminating breeding areas. Thirty-two percent (32%) of agencies report that other city or county governmental units enforce nuisance ordinances specifically addressing mosquito habitats. (See Graphs 8.1 thru 8.3.1, 8.5.3, 8.5.4 & 8.6.3 and Data Tables 8.1, 8.2, 8.5.3, 8.5.4, & 8.6.3)

Twenty percent (20%) of local public health agencies conduct activities to prevent development of mosquito larvae and 10% spray chemicals to kill adult mosquitoes. Other local governmental units are more likely to perform these activities. Thirty-five percent (35%) of agencies report that other city or county governmental units use chemicals or other methods to prevent development of larvae and to kill adult

mosquitoes. (See Graphs 8.5.6, 8.5.7 & 8.6.1 thru 8.6.3 and Data Tables 8.5.6, 8.5.7 & 8.6.1 thru 8.6.3)

Planning Prevention and Control: 61% of agencies annually develop a plan to prevent and control WNV, and 48% involve other agencies in the planning process. (See Graphs 8.5.8 & 8.5.9 and Data Tables 8.5.8 & 8.5.9)

Public Health Policy: 17% of local agencies believe local citizens would have no reservations, and 29% believe there would be some reservations, regarding enforcement actions enabled by local nuisance ordinances to eliminate mosquito breeding habitat, however, 42% are unsure of public acceptance of public policy of this nature. More agencies (29%) believe that there would be no reservations if non-enforceable mediation activities were conducted to resolve complaints related to mosquito breeding habitat. Thirty-five percent (35%) of agencies are unsure of the level of public acceptance of non-enforceable mediation activities. (See Graphs 8.7.1 & 8.7.2 and Data Tables 8.7.1 & 8.7.2)

CHAPTER 4

II. VARIATION IN ACTIVITIES TO PREVENT WEST NILE VIRUS BY SIZE OF POPULATION SERVED - 2004

Local public health agencies that serve larger population sizes are reportedly using a wider variety of methods to provide outreach and education aimed at prevention of WNV. Larger agencies, as well as other governmental units in larger population areas, are more likely to be performing activities to reduce mosquito-breeding habitat, and to reduce the number of adult mosquitoes than agencies or other governmental units in areas that are more sparsely populated. More surveillance activities are done by large agencies than by smaller ones, and large agencies are more likely to develop annual plans to address the threat of WNV.

Public Education: Nearly all agencies conduct public outreach activities to promote mosquito bite prevention, but agencies that serve larger sizes of population are more likely to specifically target their outreach to adults over 50. Eighty-one percent (81%) of agencies that serve populations between 40,001 and 80,000, and 85% of agencies that serve populations over 80,000 target the older segment of their population. Only 60% to 72% of agencies in the 2 groups that serve populations 40,000 or fewer target their outreach activities. (See Graphs 8.1 thru 8.3.1 & 8.3.2 and Data Tables 8.3.1 & 8.3.2)

The methods used for public outreach differ according to size of population served by the agency. Eighty-one percent (81%) of agencies that serve populations between 40,001 and 80,000, and 92% of agencies that serve populations over 80,000 provide media interviews as a means to educate on WNV prevention, while only 38% of agencies that serve populations fewer than 20,000 use this method. Ninety-two percent (92%) of agencies that serve populations over 80,000 provide prevention information through their website; only 24% to 41% of agencies in groups that serve other sizes of population utilize a website for this purpose. All agencies that serve populations over 80,000 do community presentations to outreach with prevention education, while only 38% of the smallest agencies reportedly provide presentations. Sixty-nine percent (69%) of agencies that serve populations between 40,001 and 80,000 and 66% of those that serve populations between 20,001 and 40,000 provide community presentations on WNV prevention. (See Graph 8.4 and Data Table 8.4)

Surveillance: Most agencies, regardless of size of the population they serve, submit dead birds to be tested for WNV, however, agencies that serve populations greater than 80,000 are more likely to also submit adult mosquitoes and larvae for testing. Seventy-seven percent (77%) of the largest agencies submit adult mosquitoes and larvae, while only 7% of the smallest agencies do so. Agencies that serve populations greater than 80,000 are more likely to plot results of testing on a map; 77% of the largest agencies utilize a method to demonstrate test results geographically while only 14% of the smallest agencies do so. (See Graphs 8.5.1, 8.5.2 & 8.5.5 and Data Tables 8.5.1, 8.5.2 & 8.5.5)

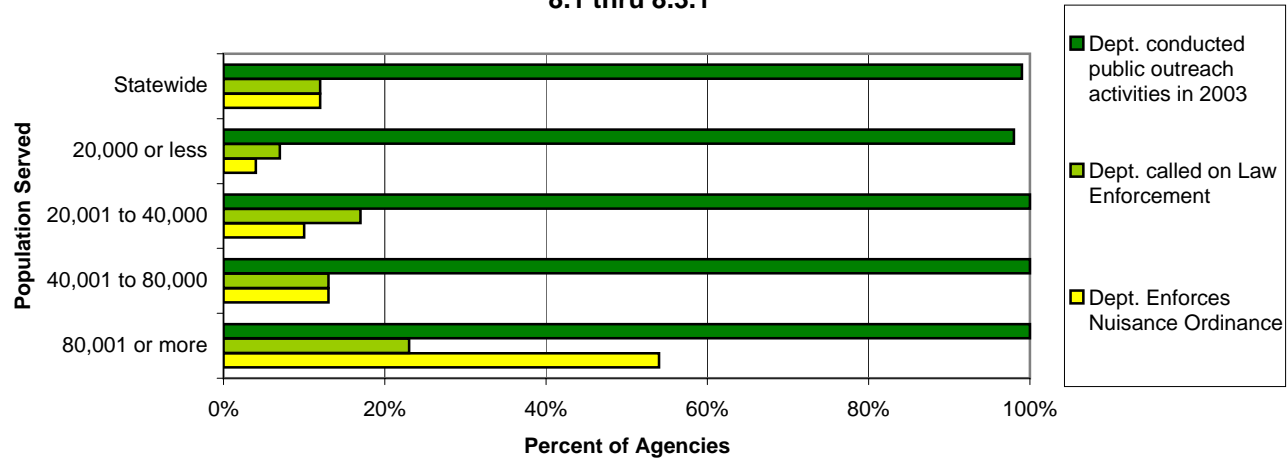
Response to Public: 92% of agencies that serve populations over 80,000 reportedly respond to citizen complaints of large number of mosquitoes; 45% to 66% of agencies in groups that serve other sizes of population report doing this. Agencies that serve populations over 80,000 are also more likely to assess mosquito-breeding habitat; 77% do so compared to only 14% to 34% of agencies in the 3 groups serving smaller populations. Fifty-four percent (54%) of agencies that serve populations over 80,000 enforce ordinances that address mosquito habitat, but on 4% to 13% of agencies in groups that serve other population sizes do enforcement. Other city and/or county governmental units in large population areas are also more likely than those in smaller population areas to have ordinances to eliminate mosquito-breeding habitat and to enforce them. (See Graphs 8.1 thru 8.3.1, 8.5.3, 8.5.4 & 8.6.3 and Data Tables 8.1, 8.5.3, 8.5.4 & 8.6.3)

Larvaciding to prevent development of mosquito larvae is done by 85% of agencies that serve populations over 80,000; 9% to 25% of agencies in groups that serve other sizes of population report doing this. Forty-six percent (46%) of agencies that serve populations over 80,000 spray chemicals intending to kill adult mosquitoes, while only 3% to 6% of agencies in the groups that serve smaller populations do so. Other city and county governmental units in areas with larger population are also more likely to conduct larvaciding and chemical spraying than governmental units in smaller population areas. (See Graphs 8.5.6, 8.5.7, 8.6.1 & 8.6.2 and Data Tables 8.5.6, & 8.5.7, 8.6.1 & 8.6.2)

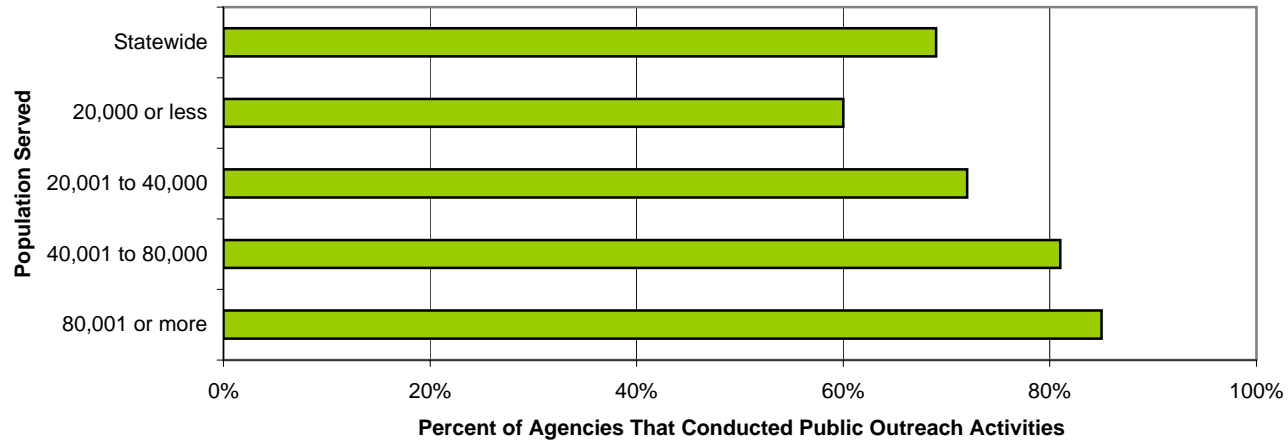
Planning Prevention and Control: 85% of agencies that serve populations over 80,000 do planning annually to respond to WNV threats compared to less than half (48%) of agencies that serve populations fewer than 20,000. Ninety-two percent of the largest agencies involve other agencies in their planning process compared to only 34% of the smallest agencies. (See Graphs 8.5.8 & 8.5.9 and Data Tables 8.5.8 & 8.5.9)

Public Health Policy: only 5% of agencies that serve populations fewer than 20,000 feel that the public would support, without reservations, public policy that addresses mosquito-breeding habitat. Only 16% of these agencies feel their public would accept non-enforceable mediation activities to reduce mosquito habitat. However, at least half (50%) are unsure of the degree of acceptance of either of these public policy strategies. Conversely, 54% of the largest agencies feel there would be no reservation regarding acceptance of nuisance ordinances intended to reduce mosquito numbers. (See Graphs 8.7.1 & 8.7.1 and Data Tables 8.7.1 & 8.7.2)

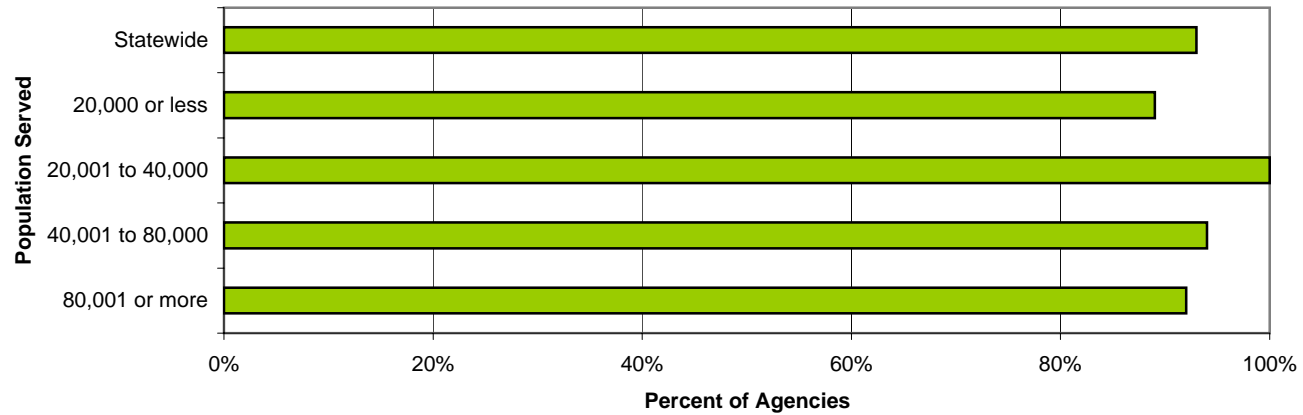
**Activities of Health Department Related to West Nile Virus Prevention and Control -
8.1 thru 8.3.1**



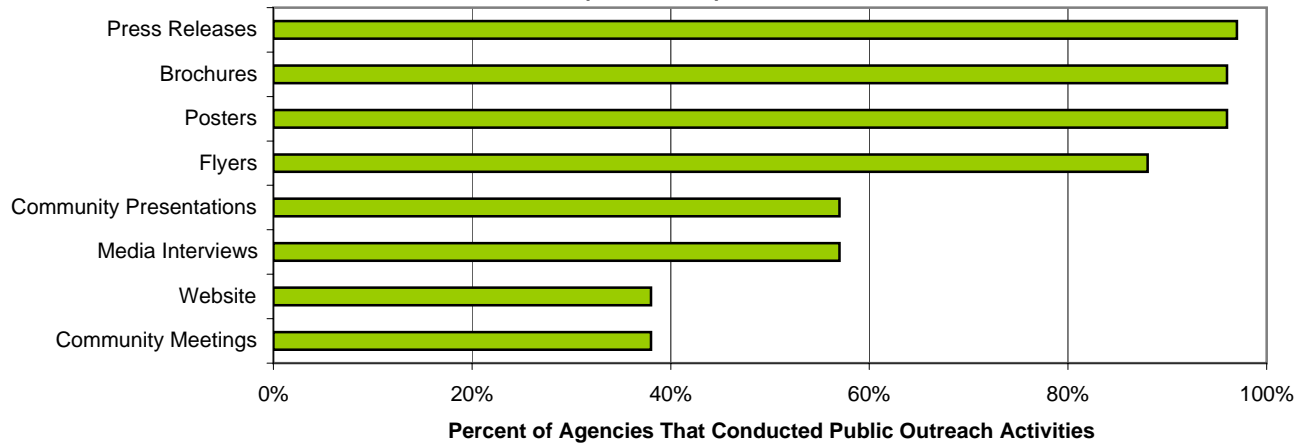
**Health Department's Public Outreach Activities in 2003 Targeted
Adults Over 50 - 8.3.2**



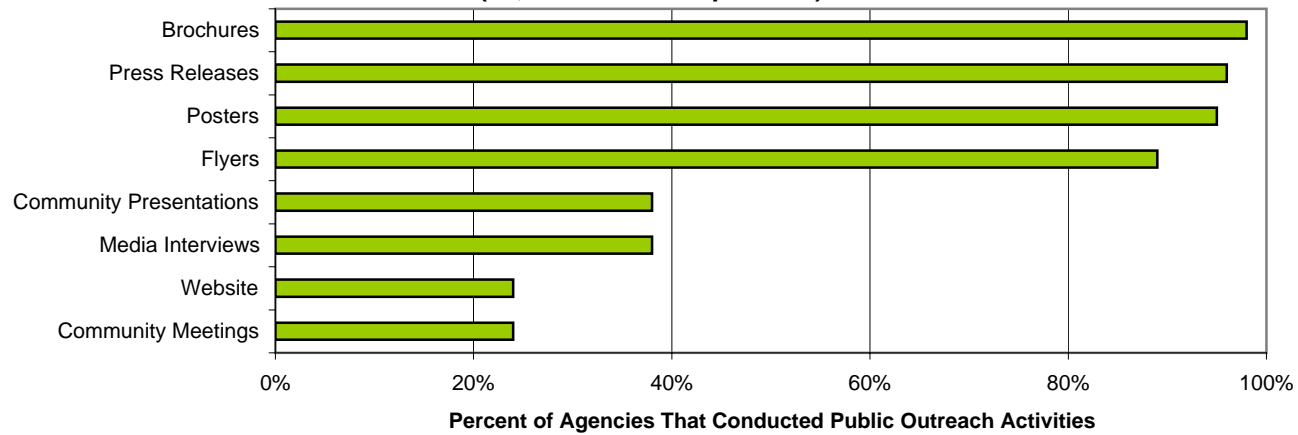
Citizens in Communities Turn to the Health Department as the Primary Source of Information on WNV Prevention - 8.3.3



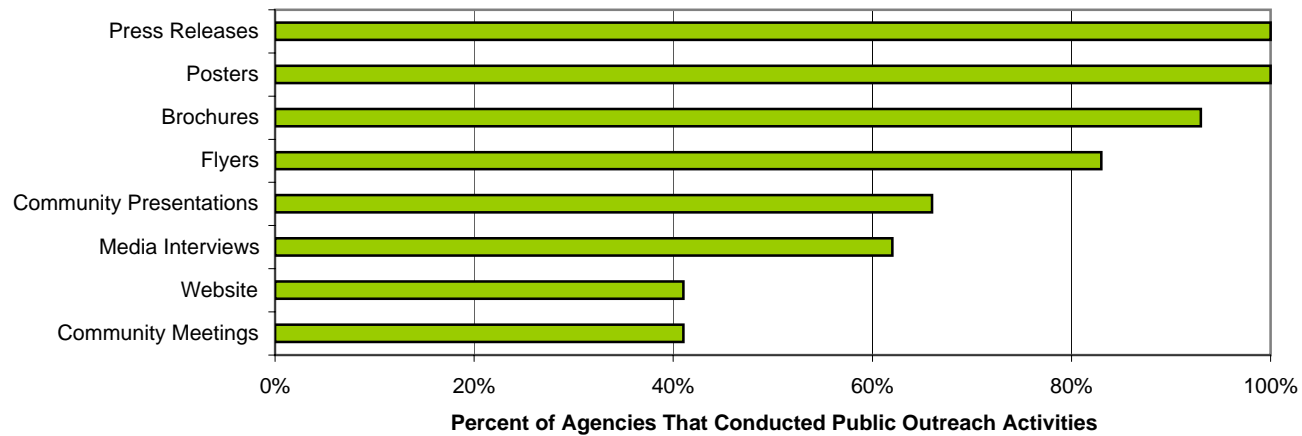
Public Outreach Materials or Events That Were Part of Department's 2003 WNV Prevention Activities - 8.4 (Statewide)



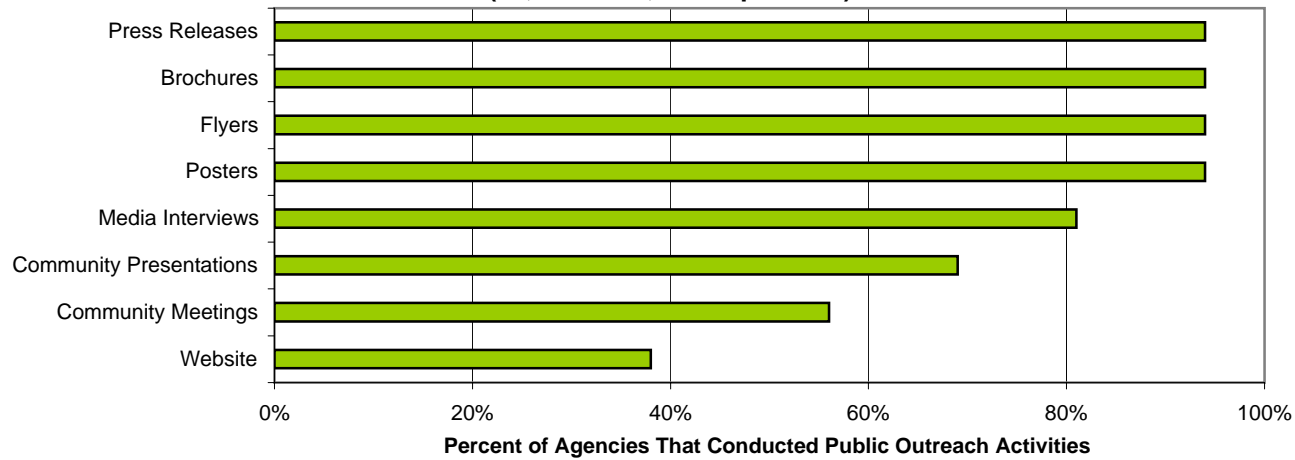
**Public Outreach Materials or Events That Were Part of Department's 2003 WNV
Prevention Activities - 8.4
(20,000 or Less Population)**



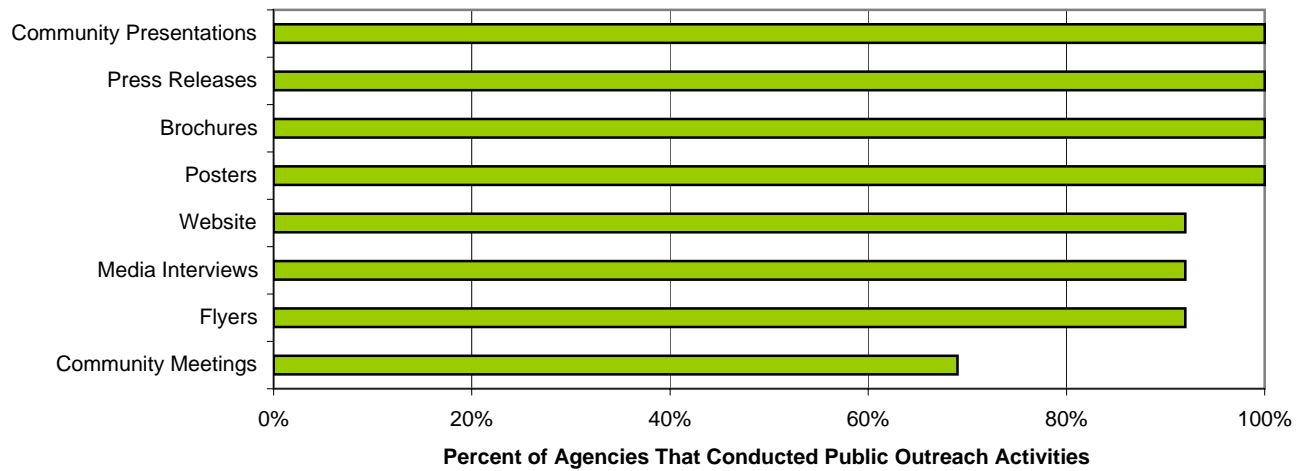
**Public Outreach Materials or Events That Were Part of Department's 2003 WNV
Prevention Activities - 8.4
(20,001 to 40,000 Population)**



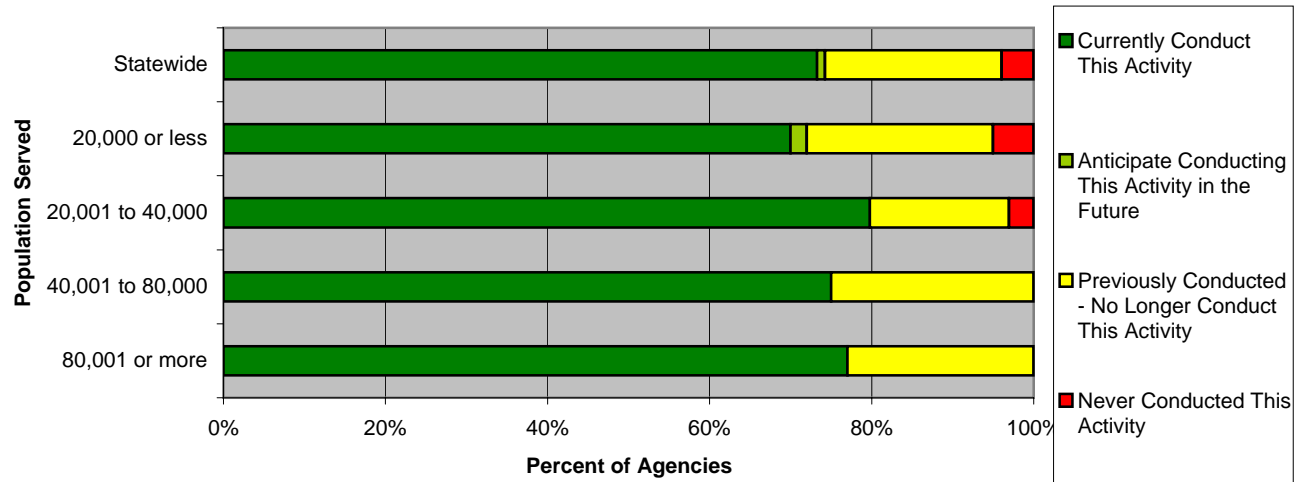
**Public Outreach Materials or Events That Were Part of Department's 2003 WNV
Prevention Activities - 8.4
(40,001 to 80,000 Population)**



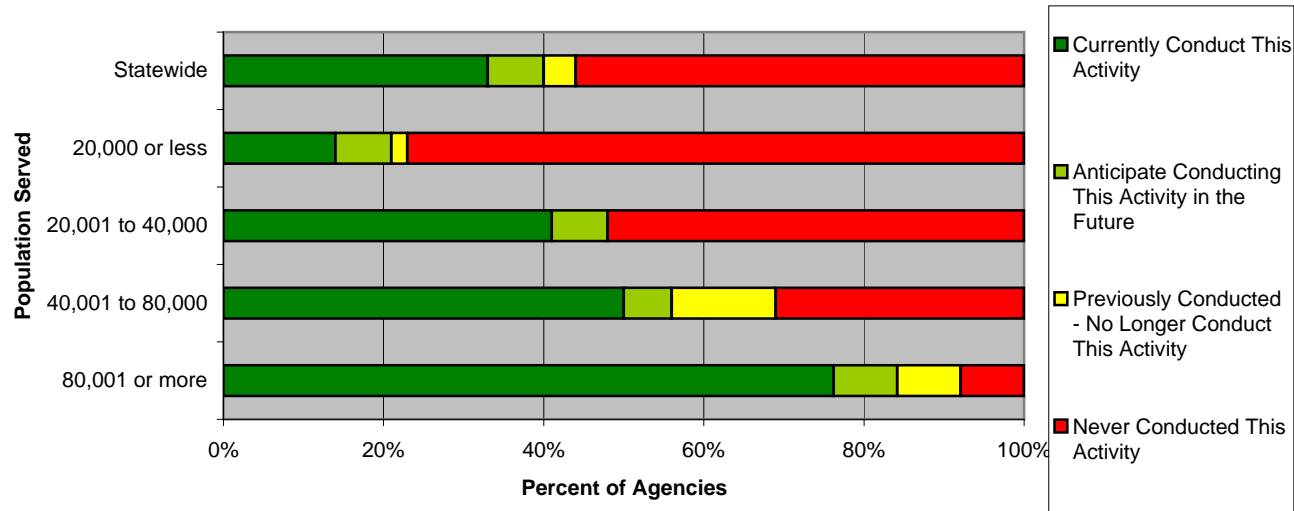
**Public Outreach Materials or Events That Were Part of Department's 2003 WNV
Prevention Activities - 8.4
(80,001 or more Population)**



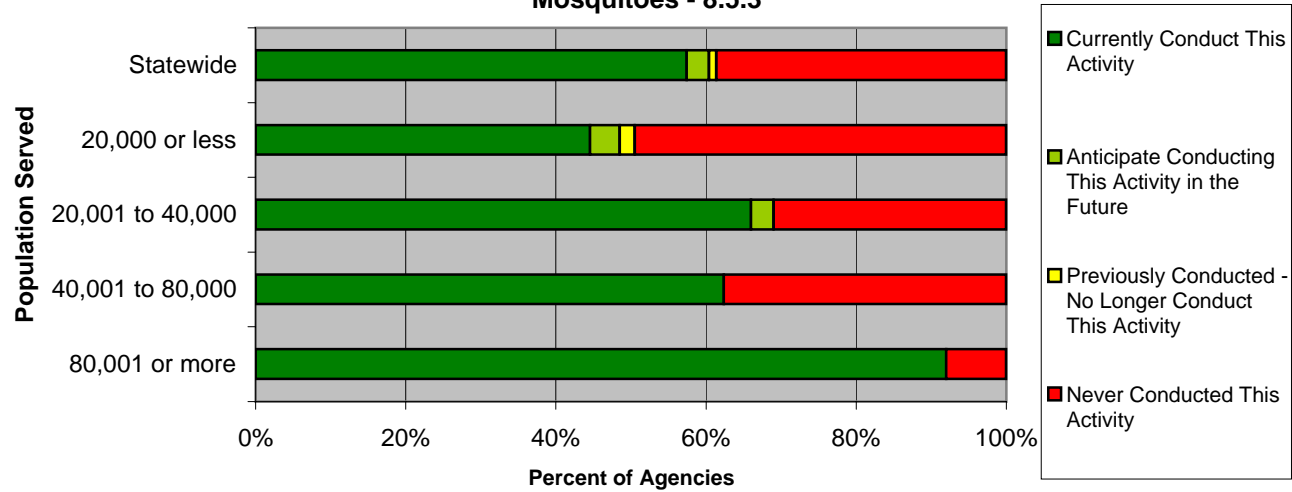
Health Department Submits Dead Birds for Testing - 8.5.1



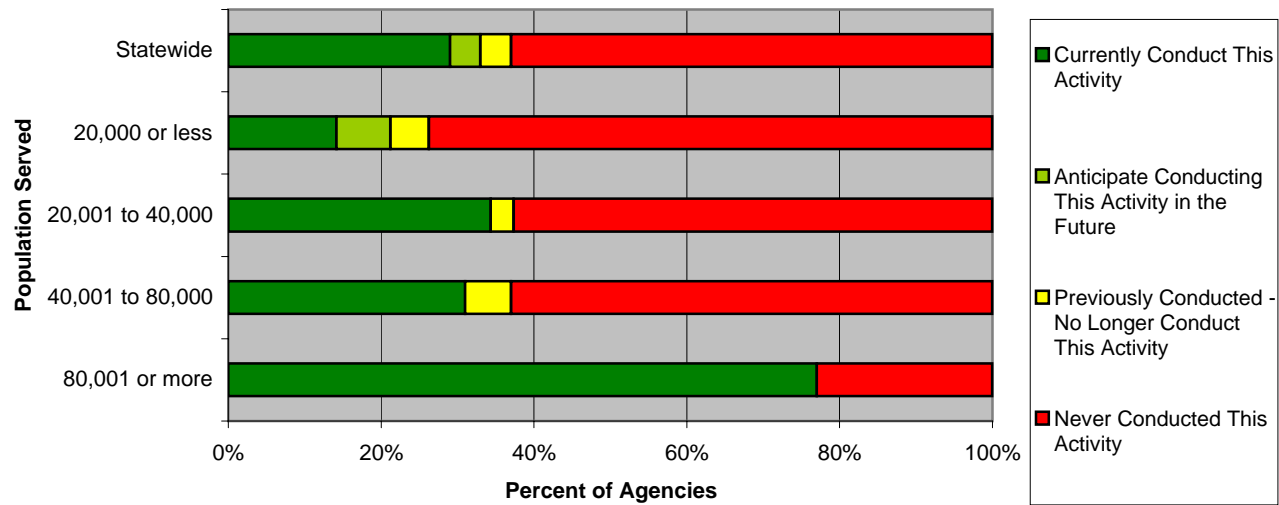
Health Department Tracks Dead Bird Reports Using GIS or Pins in Map - 8.5.2



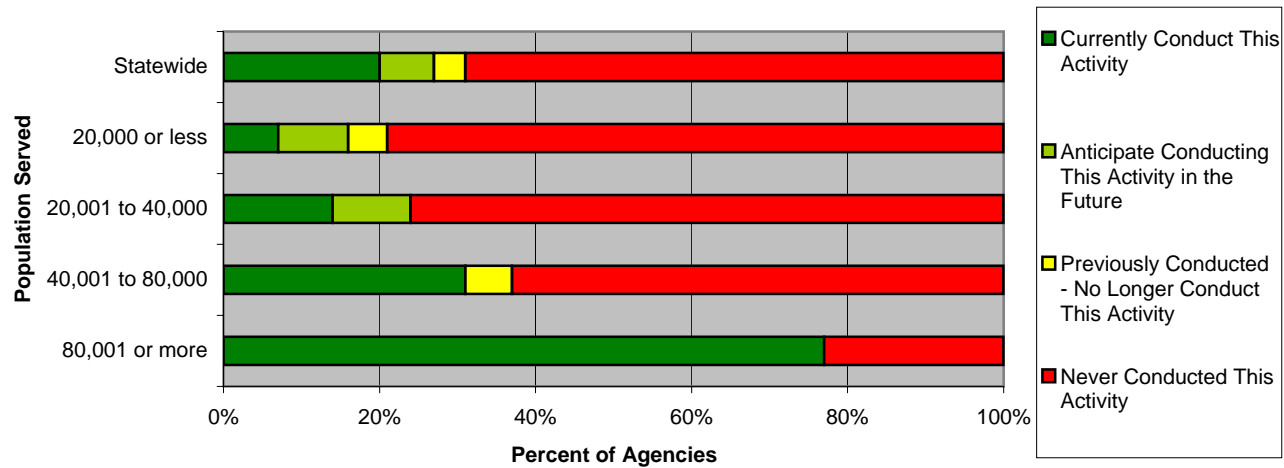
Health Department Responds to Public Complaints of Large Numbers of Mosquitoes - 8.5.3



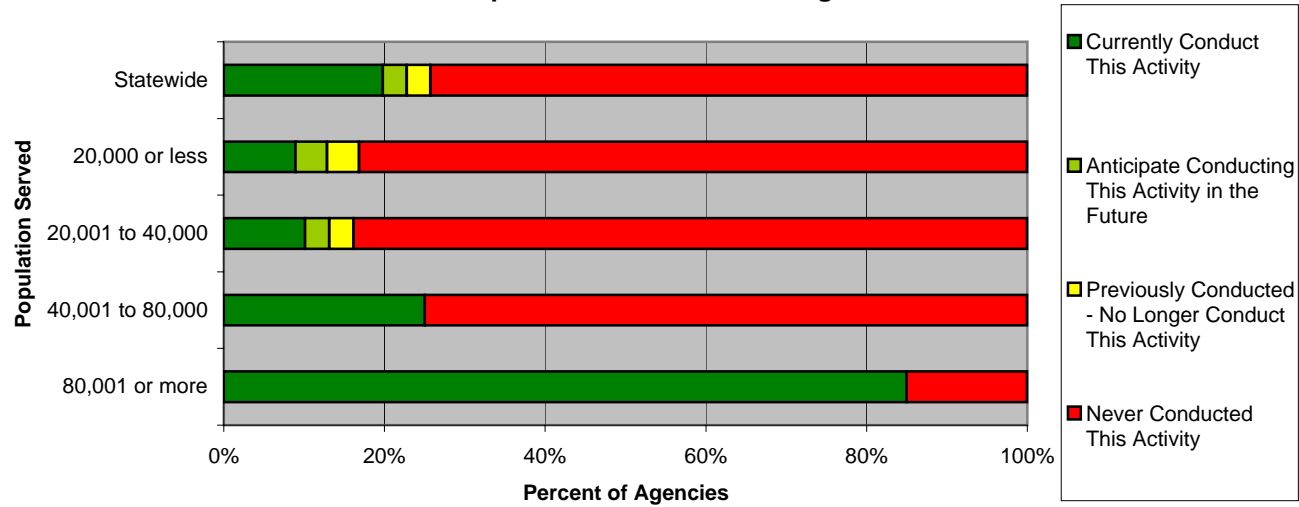
Health Department Conducts an Assessment of Mosquito Breeding Habitats - 8.5.4



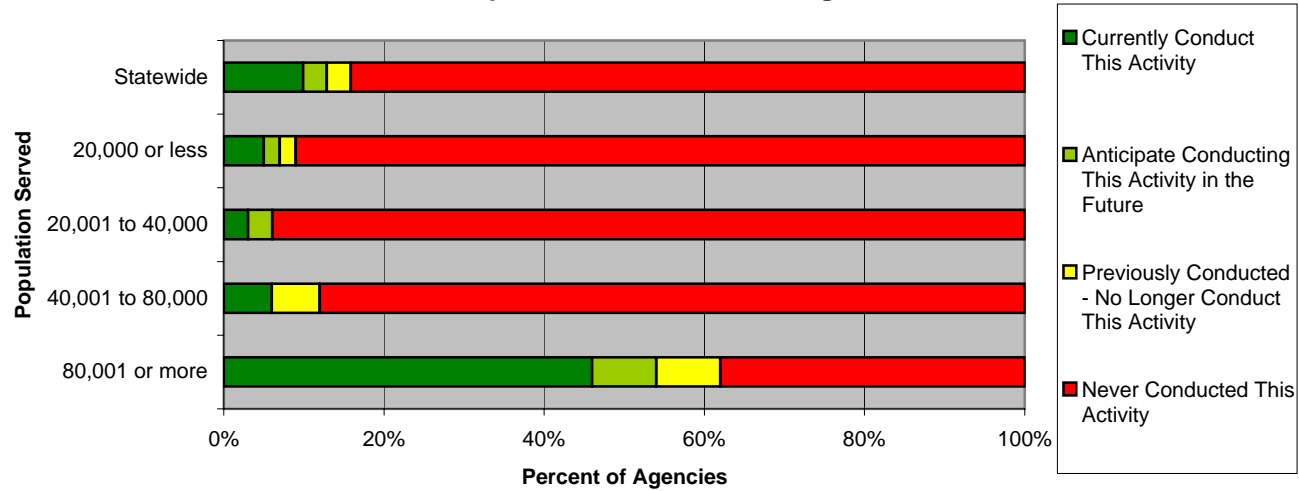
Health Department Does Mosquito Surveillance - 8.5.5



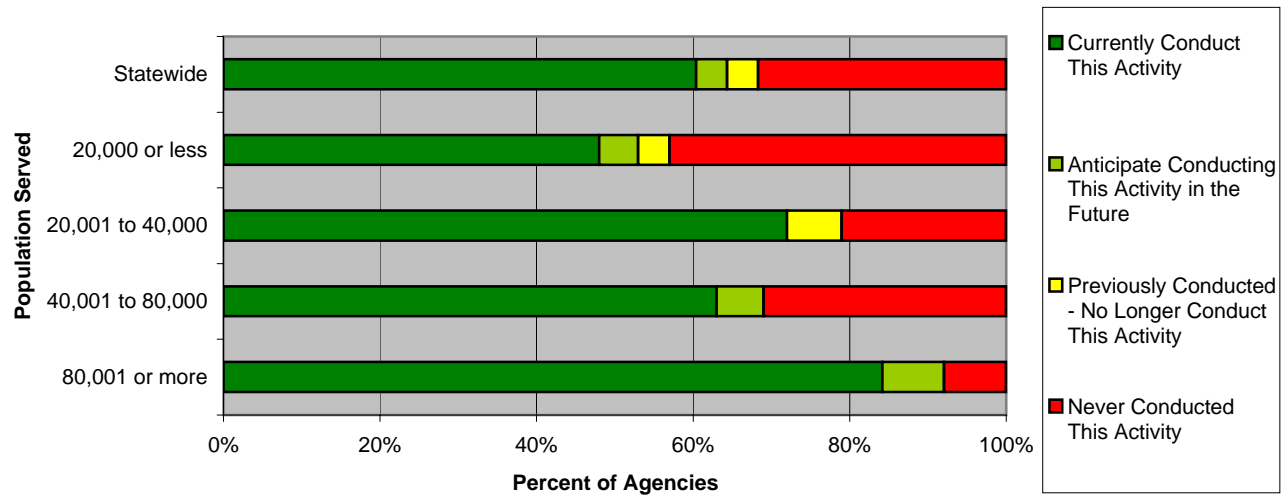
Health Department Does Larvaciding - 8.5.6



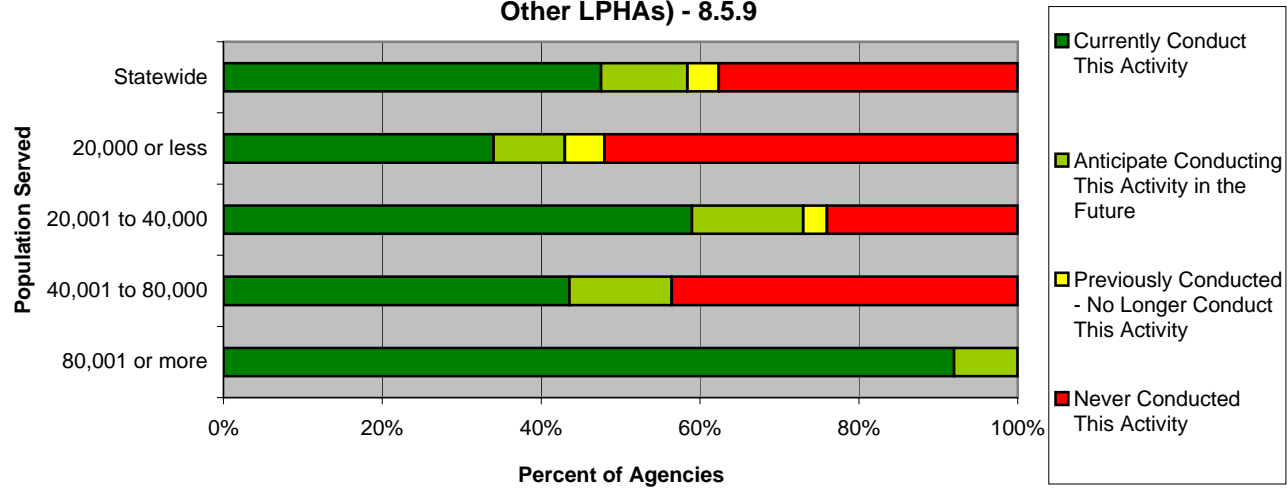
Health Department Does Adulticiding - 8.5.7



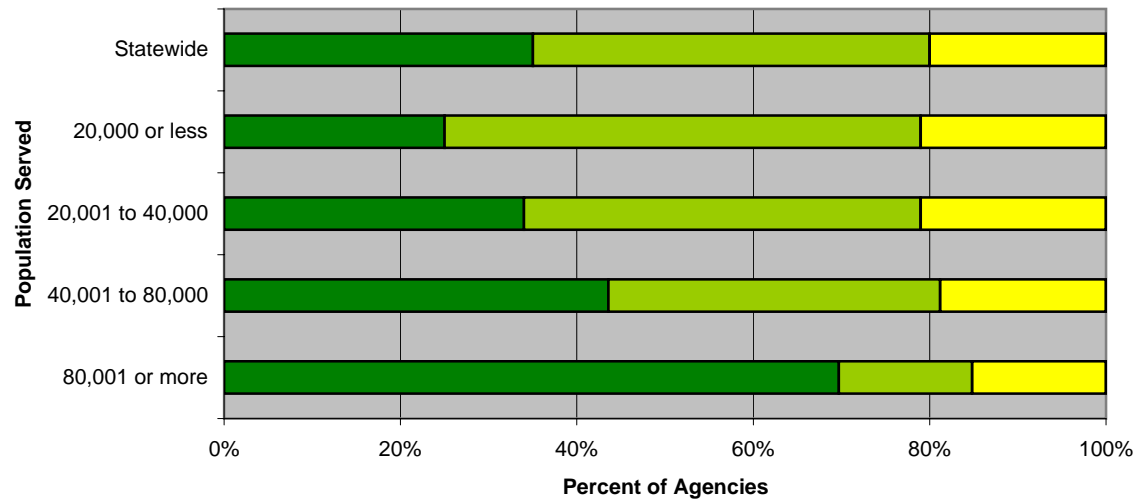
Health Department Does Yearly WNV Response Planning (LPHA Staff) - 8.5.8



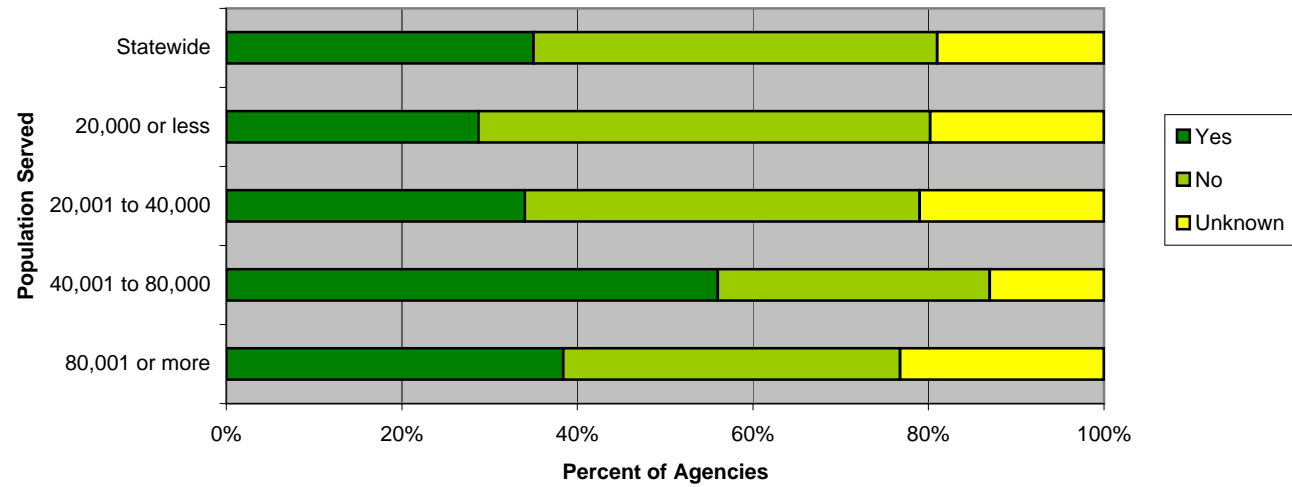
Health Department Does Yearly WNV Response Planning (LPHA, Federal, State and Other LPHAs) - 8.5.9



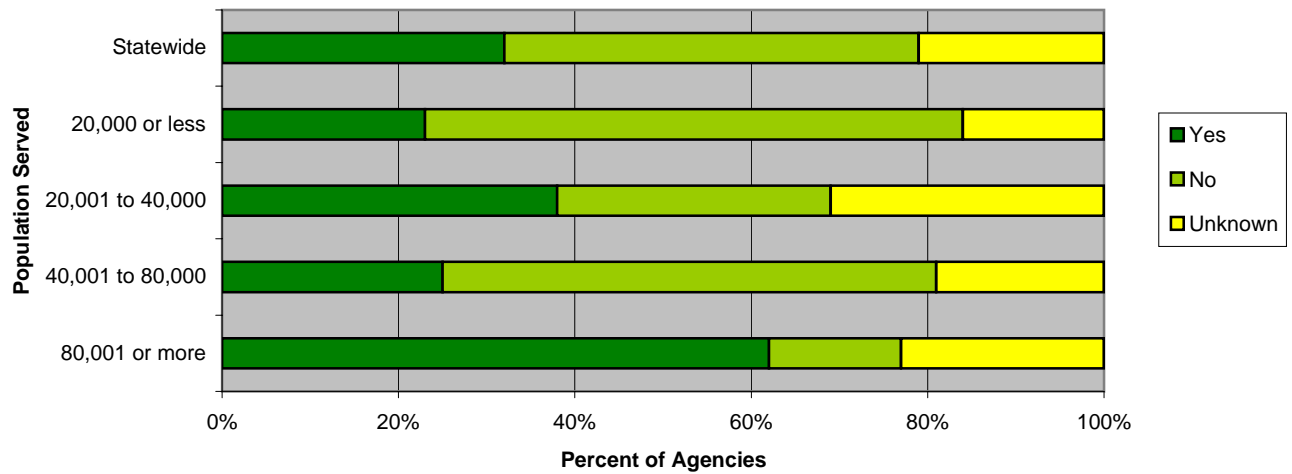
Other Municipal/County Government Unit in Jurisdiction Does Larvaciding - 8.6.1



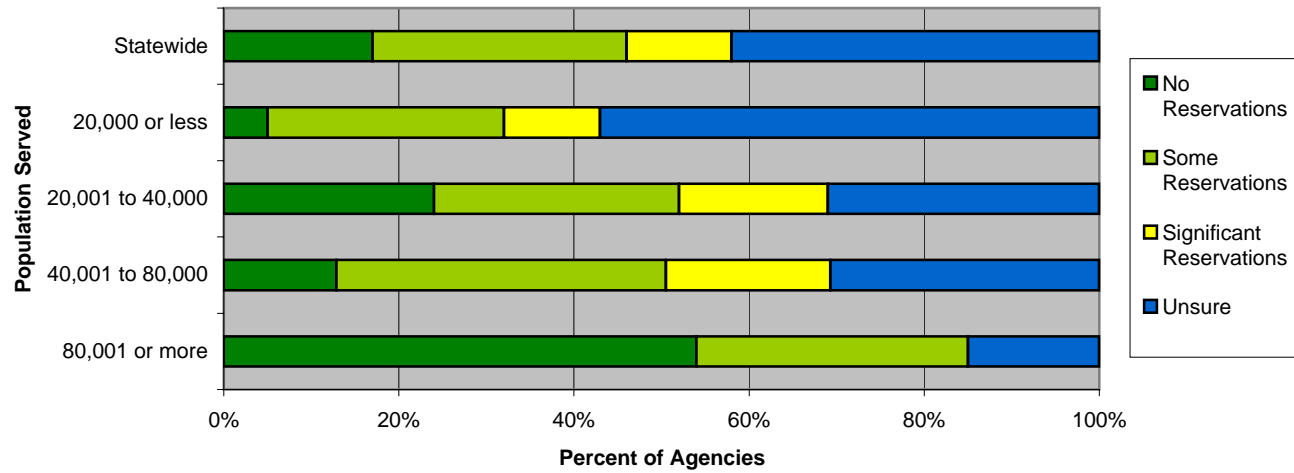
Other Municipal/County Government Unit In Jurisdiction Does Adulticiding - 8.6.2



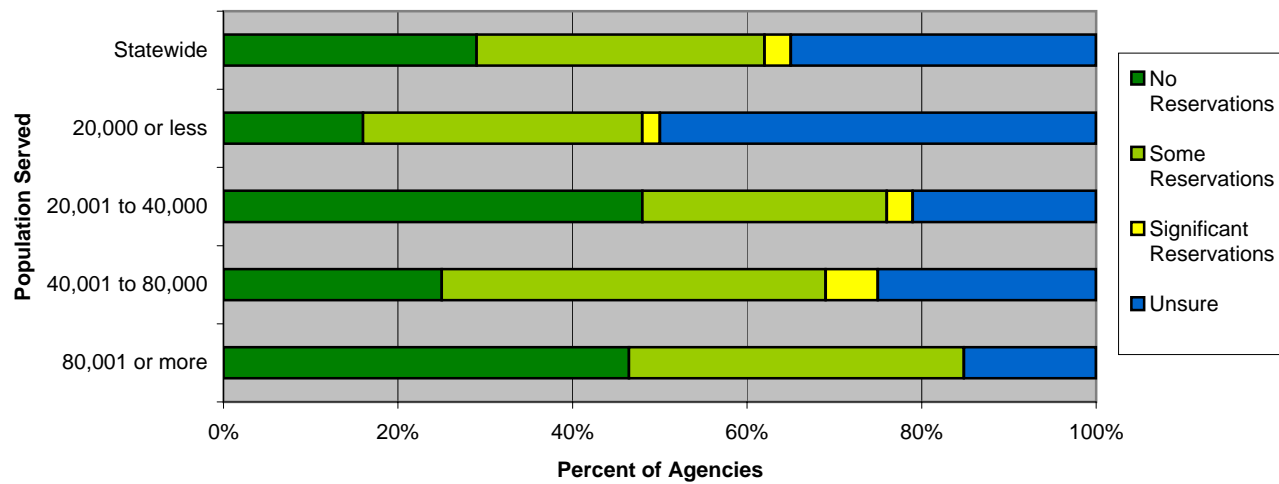
Other Municipal/County Government Units in Jurisdiction Enforce Nuisance Ordinances Addressing Mosquito Breeding Habitats - 8.6.3



Local Citizens' Acceptance of Authority for LPHA or Other Government Unit to Enforce of Nuisance Ordinances - 8.7.1



Local Citizens' Acceptance of Mosquito Breeding Mediation Activities of LPHA or Other Government Unit - 8.7.2



CHAPTER 4

DATA TABLES

ACTIVITIES RELATED TO WEST NILE VIRUS PREVENTION AND CONTROL

8. ACTIVITIES RELATED TO WNV PREVENTION AND CONTROL

8.1. Does your Health Department enforce a nuisance ordinance that specifically addresses mosquito breeding habitats?

	Number	Percent
114 Statewide	14	12%
56 Population up to 20,000	2	4%
29 Population between 20,001 and 40,000	3	10%
16 Population between 40,001 and 80,000	2	13%
13 Population over 80,001	7	54%

ACTIVITIES RELATED TO WNV PREVENTION AND CONTROL

8.2. Has your Health Department called on law enforcement to assist in eliminating mosquito breeding areas?

	Number	Percent
114 Statewide	14	12%
56 Population up to 20,000	4	7%
29 Population between 20,001 and 40,000	5	17%
16 Population between 40,001 and 80,000	2	13%
13 Population over 80,001	3	23%

ACTIVITIES RELATED TO WNV PREVENTION AND CONTROL

8.3.1. Did your Health Department conduct WNV public outreach activities in 2003 promoting mosquito bite prevention strategies?

	Number	Percent
114 Statewide	113	99%
56 Population up to 20,000	55	98%
29 Population between 20,001 and 40,000	29	100%
16 Population between 40,001 and 80,000	16	100%
13 Population over 80,001	13	100%

**ACTIVITIES RELATED TO WNV
PREVENTION AND CONTROL**

**8.3.2. Did your Health Department's public
outreach activities in 2003 target adults over 50?**

	Number	Percent*
114 Statewide	78	69%
56 Population up to 20,000	33	60%
29 Population between 20,001 and 40,000	21	72%
16 Population between 40,001 and 80,000	13	81%
13 Population over 80,001	11	85%

*Percent of Agencies identified in 8.3.1.

**ACTIVITIES RELATED TO WNV
PREVENTION AND CONTROL**

**8.3.3. Do the citizens in your communities turn to
the Health Department as the primary source of
information on WNV prevention?**

	Number	Percent
114 Statewide	106	93%
56 Population up to 20,000	50	89%
29 Population between 20,001 and 40,000	29	100%
16 Population between 40,001 and 80,000	15	94%
13 Population over 80,001	12	92%

**ACTIVITIES RELATED TO WNV
PREVENTION AND CONTROL**

**8.4. Which of the following public outreach
materials or events were part of your 2003 WNV
prevention activities?**

	Statewide	
	Number	Percent*
Posters	109	96%
Flyers	100	88%
Brochures	109	96%
Press Releases	110	97%
Media Interviews	64	57%
Community Meetings	43	38%
Community Presentations	64	57%
Website	43	38%

*Percent of Agencies identified in 8.3.1.

**ACTIVITIES RELATED TO WNV
PREVENTION AND CONTROL**

**8.4. Which of the following public outreach
materials or events were part of your 2003 WNV
prevention activities?**

	Up to 20,000 Population	
	Number	Percent*
Posters	52	95%
Flyers	49	89%
Brochures	54	98%
Press Releases	53	96%
Media Interviews	21	38%
Community Meetings	13	24%
Community Presentations	21	38%
Website	13	24%

*Percent of Agencies identified in 8.3.1.

**ACTIVITIES RELATED TO WNV
PREVENTION AND CONTROL**

**8.4. Which of the following public outreach
materials or events were part of your 2003 WNV
prevention activities?**

	20,001-40,000 Population	
	Number	Percent*
Posters	29	100%
Flyers	24	83%
Brochures	27	93%
Press Releases	29	100%
Media Interviews	18	62%
Community Meetings	12	41%
Community Presentations	19	66%
Website	12	41%

*Percent of Agencies identified in 8.3.1.

**ACTIVITIES RELATED TO WNV
PREVENTION AND CONTROL**

8.4. Which of the following public outreach materials or events were part of your 2003 WNV prevention activities?

40,001-80,000 Population		
	Number	Percent*
Posters	15	94%
Flyers	15	94%
Brochures	15	94%
Press Releases	15	94%
Media Interviews	13	81%
Community Meetings	9	56%
Community Presentations	11	69%
Website	6	38%

*Percent of Agencies identified in 8.3.1.

**ACTIVITIES RELATED TO WNV
PREVENTION AND CONTROL**

8.4. Which of the following public outreach materials or events were part of your 2003 WNV prevention activities?

Over 80,001 Population		
	Number	Percent*
Posters	13	100%
Flyers	12	92%
Brochures	13	100%
Press Releases	13	100%
Media Interviews	12	92%
Community Meetings	9	69%
Community Presentations	13	100%
Website	12	92%

*Percent of Agencies identified in 8.3.1.

**ACTIVITIES RELATED TO WNV
PREVENTION AND CONTROL**

**8.5. Rate your Health Department's ability to
conduct the following mosquito borne disease
surveillance and intervention.**

8.5.1. Submit dead birds for testing?

	Currently Conduct This Activity		Anticipate Conducting This Activity in the Future		Previously Conducted - No Longer Conduct This Activity		Never Conducted This Activity	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	84	74%	1	1%	25	22%	4	4%
56 Population up to 20,000	39	70%	1	2%	13	23%	3	5%
29 Population between 20,001 and 40,000	23	79%	0	0%	5	17%	1	3%
16 Population between 40,001 and 80,000	12	75%	0	0%	4	25%	0	0%
13 Population over 80,001	10	77%	0	0%	3	23%	0	0%

**ACTIVITIES RELATED TO WNV PREVENTION
AND CONTROL**

**8.5.2. Track dead bird reports using GIS or pins in
map?**

	Currently Conduct This Activity		Anticipate Conducting This Activity in the Future		Previously Conducted - No Longer Conduct This Activity		Never Conducted This Activity	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	38	33%	8	7%	4	4%	64	56%
56 Population up to 20,000	8	14%	4	7%	1	2%	43	77%
29 Population between 20,001 and 40,000	12	41%	2	7%	0	0%	15	52%
16 Population between 40,001 and 80,000	8	50%	1	6%	2	13%	5	31%
13 Population over 80,001	10	77%	1	8%	1	8%	1	8%

**ACTIVITIES RELATED TO WNV PREVENTION
AND CONTROL**

**8.5.3. Respond to public complaints of large
numbers of mosquitoes?**

	Currently Conduct This Activity		Anticipate Conducting This Activity in the Future		Previously Conducted - No Longer Conduct This Activity		Never Conducted This Activity	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	66	58%	3	3%	1	1%	44	39%
56 Population up to 20,000	25	45%	2	4%	1	2%	28	50%
29 Population between 20,001 and 40,000	19	66%	1	3%	0	0%	9	31%
16 Population between 40,001 and 80,000	10	63%	0	0%	0	0%	6	38%
13 Population over 80,001	12	92%	0	0%	0	0%	1	8%

**ACTIVITIES RELATED TO WNV PREVENTION
AND CONTROL**

**8.5.4. Conduct an assessment of mosquito breeding
habitats?**

	Currently Conduct This Activity		Anticipate Conducting This Activity in the Future		Previously Conducted - No Longer Conduct This Activity		Never Conducted This Activity	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	33	29%	4	4%	5	4%	72	63%
56 Population up to 20,000	8	14%	4	7%	3	5%	41	73%
29 Population between 20,001 and 40,000	10	34%	0	0%	1	3%	18	62%
16 Population between 40,001 and 80,000	5	31%	0	0%	1	6%	10	63%
13 Population over 80,001	10	77%	0	0%	0	0%	3	23%

**ACTIVITIES RELATED TO WNV PREVENTION
AND CONTROL**

**8.5.5. Mosquito surveillance? (Collecting adult
mosquitoes or larvae & send to test for disease)**

	Currently Conduct This Activity		Anticipate Conducting This Activity in the Future		Previously Conducted - No Longer Conduct This Activity		Never Conducted This Activity	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	23	20%	8	7%	4	4%	79	69%
56 Population up to 20,000	4	7%	5	9%	3	5%	44	79%
29 Population between 20,001 and 40,000	4	14%	3	10%	0	0%	22	76%
16 Population between 40,001 and 80,000	5	31%	0	0%	1	6%	10	63%
13 Population over 80,001	10	77%	0	0%	0	0%	3	23%

**ACTIVITIES RELATED TO WNV PREVENTION
AND CONTROL**

**8.5.6. Larvaciding: Activities to kill or prevent
development of mosquito larvae (chemical,
biological, or physical).**

	Currently Conduct This Activity		Anticipate Conducting This Activity in the Future		Previously Conducted - No Longer Conduct This Activity		Never Conducted This Activity	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	23	20%	3	3%	3	3%	85	75%
56 Population up to 20,000	5	9%	2	4%	2	4%	47	84%
29 Population between 20,001 and 40,000	3	10%	1	3%	1	3%	24	83%
16 Population between 40,001 and 80,000	4	25%	0	0%	0	0%	12	75%
13 Population over 80,001	11	85%	0	0%	0	0%	2	15%

**ACTIVITIES RELATED TO WNV PREVENTION
AND CONTROL**

**8.5.7. Adulticiding: Spraying chemicals with the
intent of killing adult mosquitoes.**

	Currently Conduct This Activity		Anticipate Conducting This Activity in the Future		Previously Conducted - No Longer Conduct This Activity		Never Conducted This Activity	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	11	10%	3	3%	3	3%	97	85%
56 Population up to 20,000	3	5%	1	2%	1	2%	51	91%
29 Population between 20,001 and 40,000	1	3%	1	3%	0	0%	27	93%
16 Population between 40,001 and 80,000	1	6%	0	0%	1	6%	14	88%
13 Population over 80,001	6	46%	1	8%	1	8%	5	38%

**ACTIVITIES RELATED TO WNV PREVENTION
AND CONTROL**

**8.5.8. Yearly WNV response planning? (LPHA
staff)**

	Currently Conduct This Activity		Anticipate Conducting This Activity in the Future		Previously Conducted - No Longer Conduct This Activity		Never Conducted This Activity	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	69	61%	5	4%	4	4%	36	32%
56 Population up to 20,000	27	48%	3	5%	2	4%	24	43%
29 Population between 20,001 and 40,000	21	72%	0	0%	2	7%	6	21%
16 Population between 40,001 and 80,000	10	63%	1	6%	0	0%	5	31%
13 Population over 80,001	11	85%	1	8%	0	0%	1	8%

**ACTIVITIES RELATED TO WNV PREVENTION
AND CONTROL**

**8.5.9. Yearly WNV response planning? (LPHA,
federal, state and other LPHAs)**

	Currently Conduct This Activity		Anticipate Conducting This Activity in the Future		Previously Conducted - No Longer Conduct This Activity		Never Conducted This Activity	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	55	48%	12	11%	4	4%	43	38%
56 Population up to 20,000	19	34%	5	9%	3	5%	29	52%
29 Population between 20,001 and 40,000	17	59%	4	14%	1	3%	7	24%
16 Population between 40,001 and 80,000	7	44%	2	13%	0	0%	7	44%
13 Population over 80,001	12	92%	1	8%	0	0%	0	0%

**ACTIVITIES RELATED TO WNV
PREVENTION AND CONTROL**

**8.6. Are other municipal/county government units
in your jurisdiction conducting the following
activities?**

**8.6.1. Larvaciding: Activities to kill or prevent
development of mosquito larvae (chemical,
biological, or physical).**

	Yes		No		Unknown	
	Number	Percent	Number	Percent	Number	Percent
114 Statewide	40	35%	51	45%	23	20%
56 Population up to 20,000	14	25%	30	54%	12	21%
29 Population between 20,001 and 40,000	10	34%	13	45%	6	21%
16 Population between 40,001 and 80,000	7	44%	6	38%	3	19%
13 Population over 80,001	9	69%	2	15%	2	15%

**ACTIVITIES RELATED TO WNV
PREVENTION AND CONTROL**

**8.6.2. Adulticiding: Spraying chemicals with the
intent of killing adult mosquitoes.**

	Yes		No		Unknown	
	Number	Percent	Number	Percent	Number	Percent
114 Statewide	40	35%	52	46%	22	19%
56 Population up to 20,000	16	29%	29	52%	11	20%
29 Population between 20,001 and 40,000	10	34%	13	45%	6	21%
16 Population between 40,001 and 80,000	9	56%	5	31%	2	13%
13 Population over 80,001	5	38%	5	38%	3	23%

**ACTIVITIES RELATED TO WNV
PREVENTION AND CONTROL**

**8.6.3. Do other municipal/county government units
in your jurisdiction enforce nuisance ordinances
specifically addressing mosquito breeding habitats?**

	Yes		No		Unknown	
	Number	Percent	Number	Percent	Number	Percent
114 Statewide	36	32%	54	47%	24	21%
56 Population up to 20,000	13	23%	34	61%	9	16%
29 Population between 20,001 and 40,000	11	38%	9	31%	9	31%
16 Population between 40,001 and 80,000	4	25%	9	56%	3	19%
13 Population over 80,001	8	62%	2	15%	3	23%

**ACTIVITIES RELATED TO WNV
PREVENTION AND CONTROL**

8.7. Rate the local citizens' acceptance of the following public health policy responses to mosquito breeding habitats.

8.7.1. Authority for the LPHA or other municipal/county government to inspect mosquito breeding habitats with possible enforcement action enabled by local nuisance ordinances.

	No Reservations		Some Reservations		Significant Reservations		Unsure	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	19	17%	33	29%	14	12%	48	42%
56 Population up to 20,000	3	5%	15	27%	6	11%	32	57%
29 Population between 20,001 and 40,000	7	24%	8	28%	5	17%	9	31%
16 Population between 40,001 and 80,000	2	13%	6	38%	3	19%	5	31%
13 Population over 80,001	7	54%	4	31%	0	0%	2	15%

**ACTIVITIES RELATED TO WNV
PREVENTION AND CONTROL**

8.7.2. Reduction of mosquito breeding habitat through non-enforceable mediation activities conducted by LPHA or other municipal/county government staff (i.e. complaints are resolved convincing responsible parties to "do the right thing".)

	No Reservations		Some Reservations		Significant Reservations		Unsure	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
114 Statewide	33	29%	38	33%	3	3%	40	35%
56 Population up to 20,000	9	16%	18	32%	1	2%	28	50%
29 Population between 20,001 and 40,000	14	48%	8	28%	1	3%	6	21%
16 Population between 40,001 and 80,000	4	25%	7	44%	1	6%	4	25%
13 Population over 80,001	6	46%	5	38%	0	0%	2	15%

CHAPTER 5

1. SUMMARY OF COMMUNICABLE DISEASE REPORTING - 2004

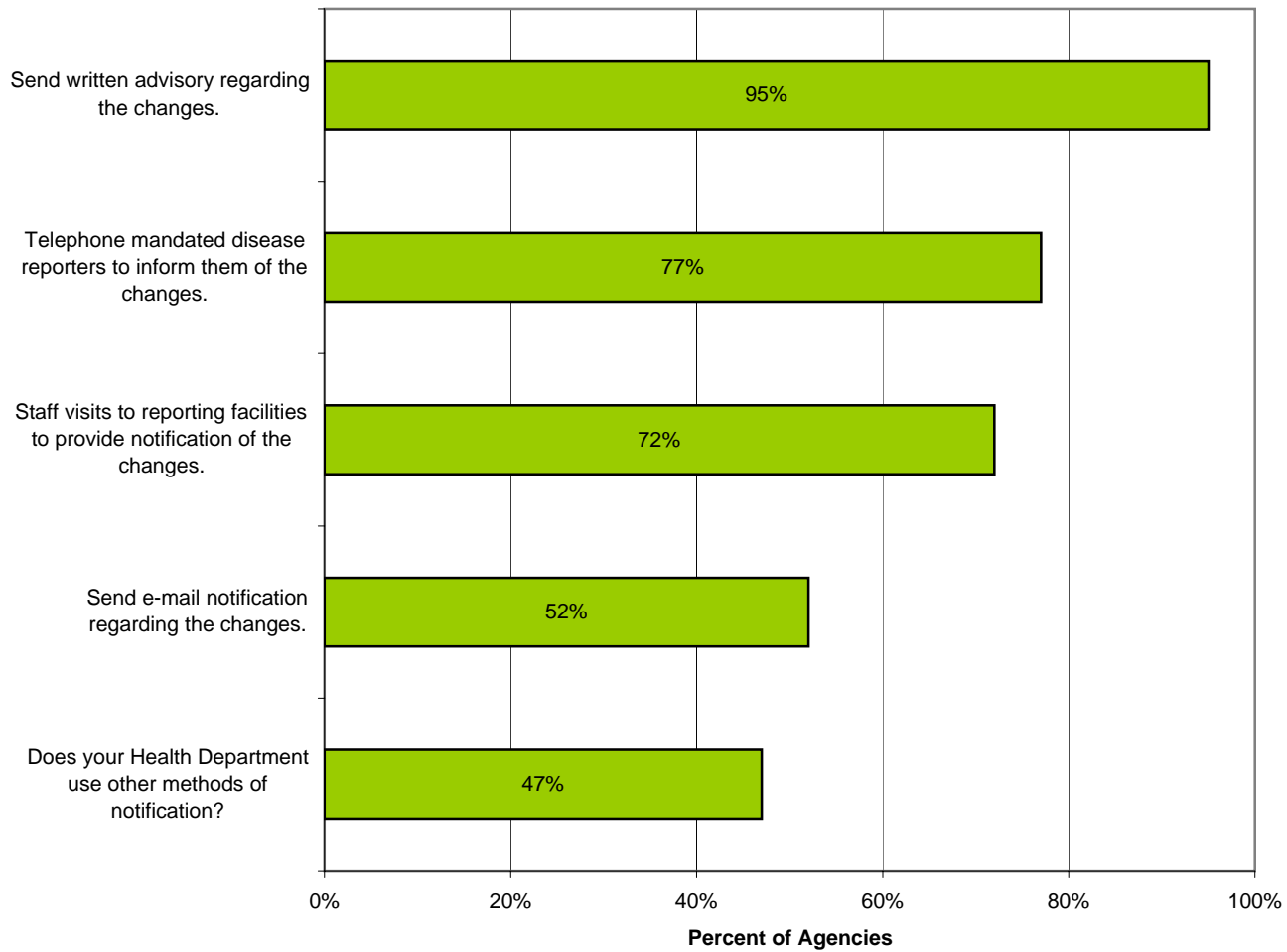
This chapter provides information about practices of local public health agencies to inform mandated disease reporters about the state's communicable disease reporting rules. Information is also included to reveal agencies' uses of the state's electronic system (MOHSIS) that was developed for the purpose of collecting data on communicable disease cases.

Methods to Notify Disease Reporters: there are occasionally changes in the Code of State Regulations that mandate physicians, laboratories, hospitals, and others to report communicable diseases to state or local public health agencies. Addition of new diseases such as Severe Acute Respiratory Syndrome (SARS) or Varicella (Chickenpox) is an example of a change about which mandated reporters must be made aware. When changes occur in reporting rules, 95% of local public health agencies notify disease reporting facilities in their jurisdiction by sending a written advisory, 77% of agencies use redundant methods such as telephoning to explain what has changed, and 72% also send staff to visit and to discuss changes with disease reporters. Other methods including e-mail are employed by approximately 50% of agencies. (See Graph 9.5 & Data Table 9.5)

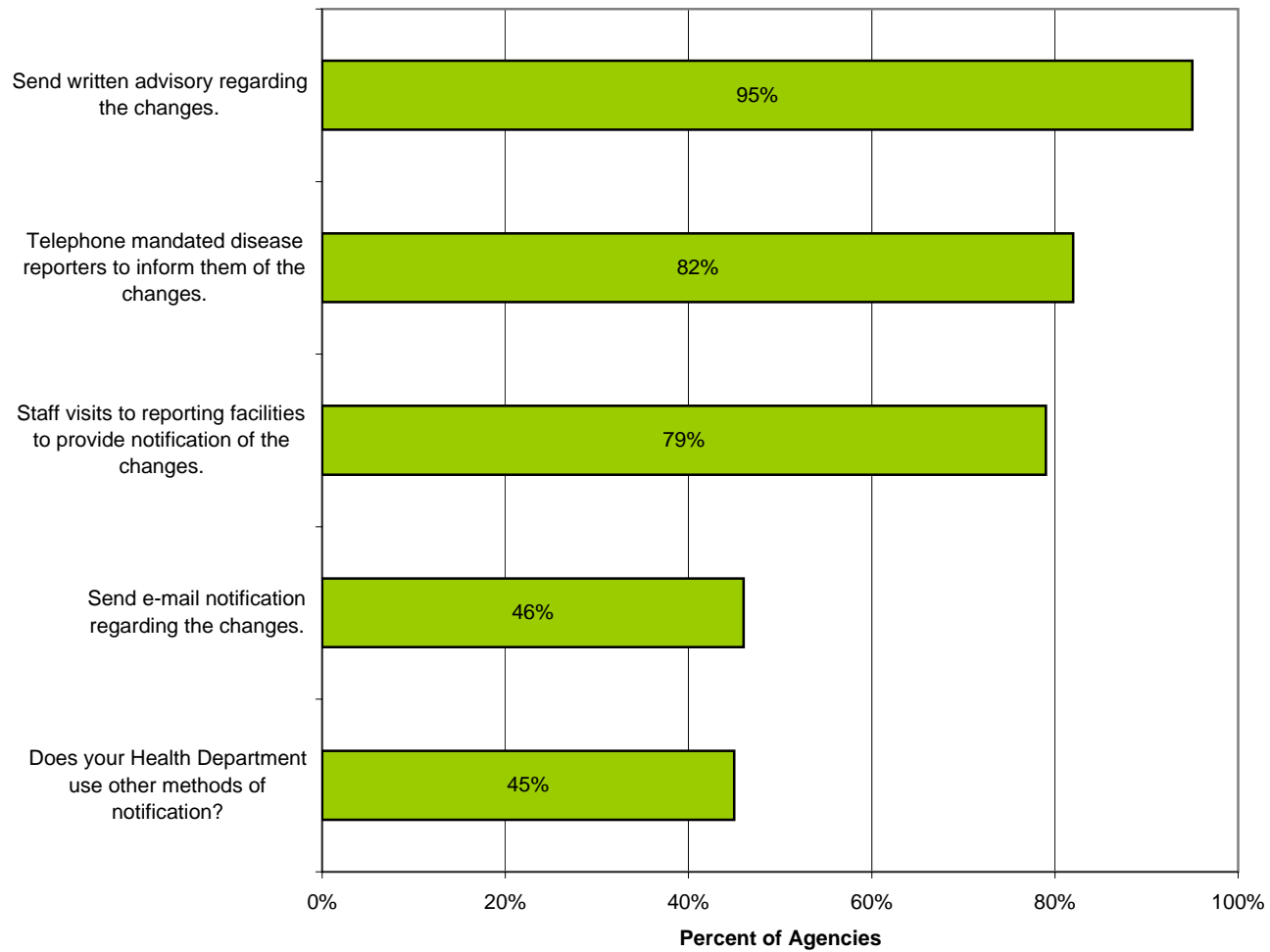
Use of MOHSIS System: 74% of local public health agencies use MOHSIS exclusively to enter disease case reports. Eighty-six percent (86%) of agencies obtain further benefit from the system by using MOHSIS reports to obtain communicable disease morbidity data used in their community health assessment. Over 60% of agencies rely on MOHSIS reports to ascertain the presence of certain conditions in their city or county, or to analyze disease trends. (See Graphs 9.6 & 9.6.5 and Data Tables 9.6 & 9.6.5)

Preferred Enhancement of MOHSIS System: More agencies (57%) would prefer to have enhancement in the notification components of the system than to have other potential system updates. Seventy-five percent (75%) of agencies would like to have sexually transmitted disease categories added to the system's inventory of disease. (See Graphs 9.7 & 9.8 and Data Tables 9.7 & 9.8)

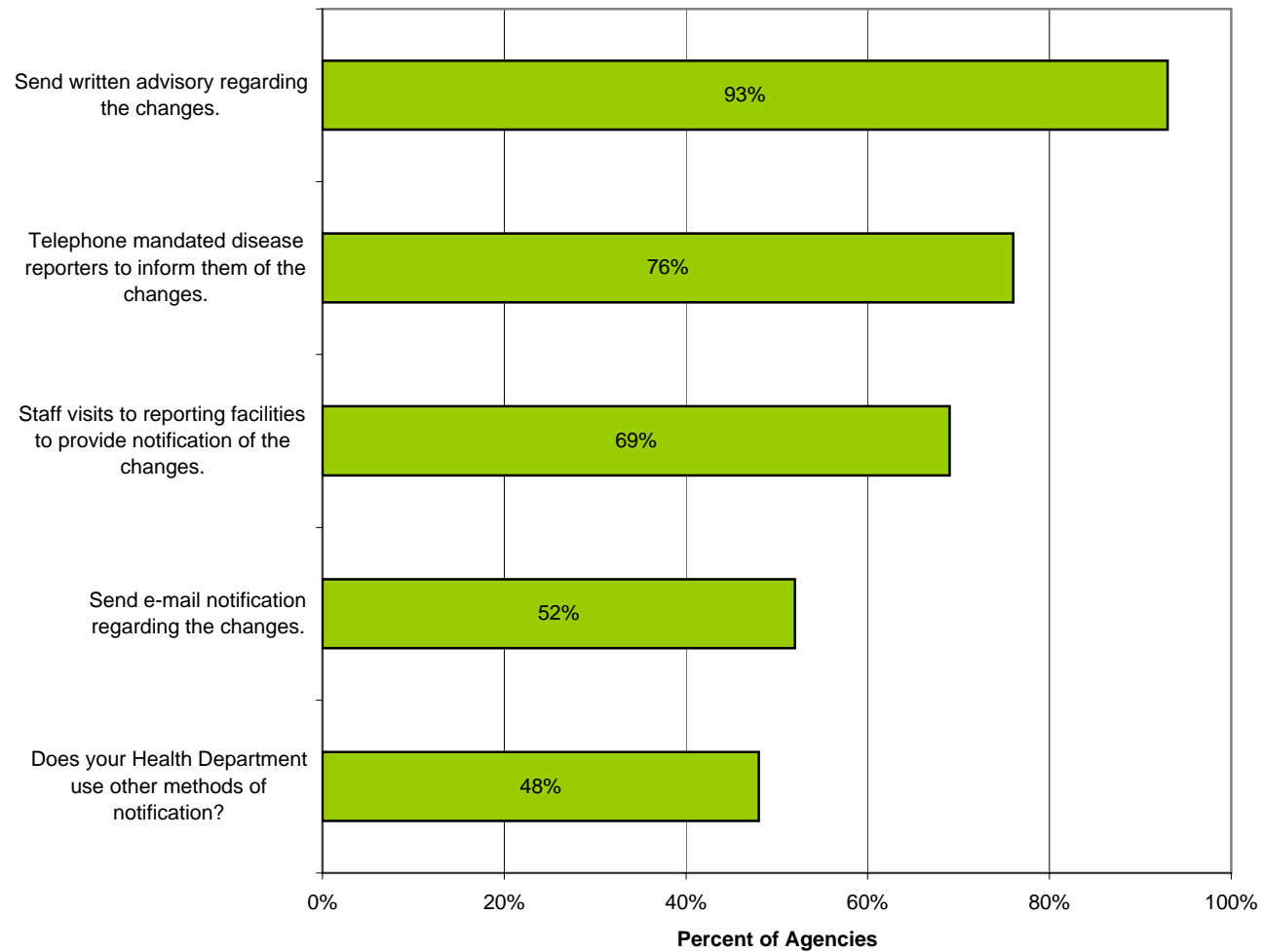
**Health Department Uses Methods to Notify Disease Reporting Facilities of Changes
to Communicable Disease Reporting Rule - 9.5
Statewide (114 Agencies)**



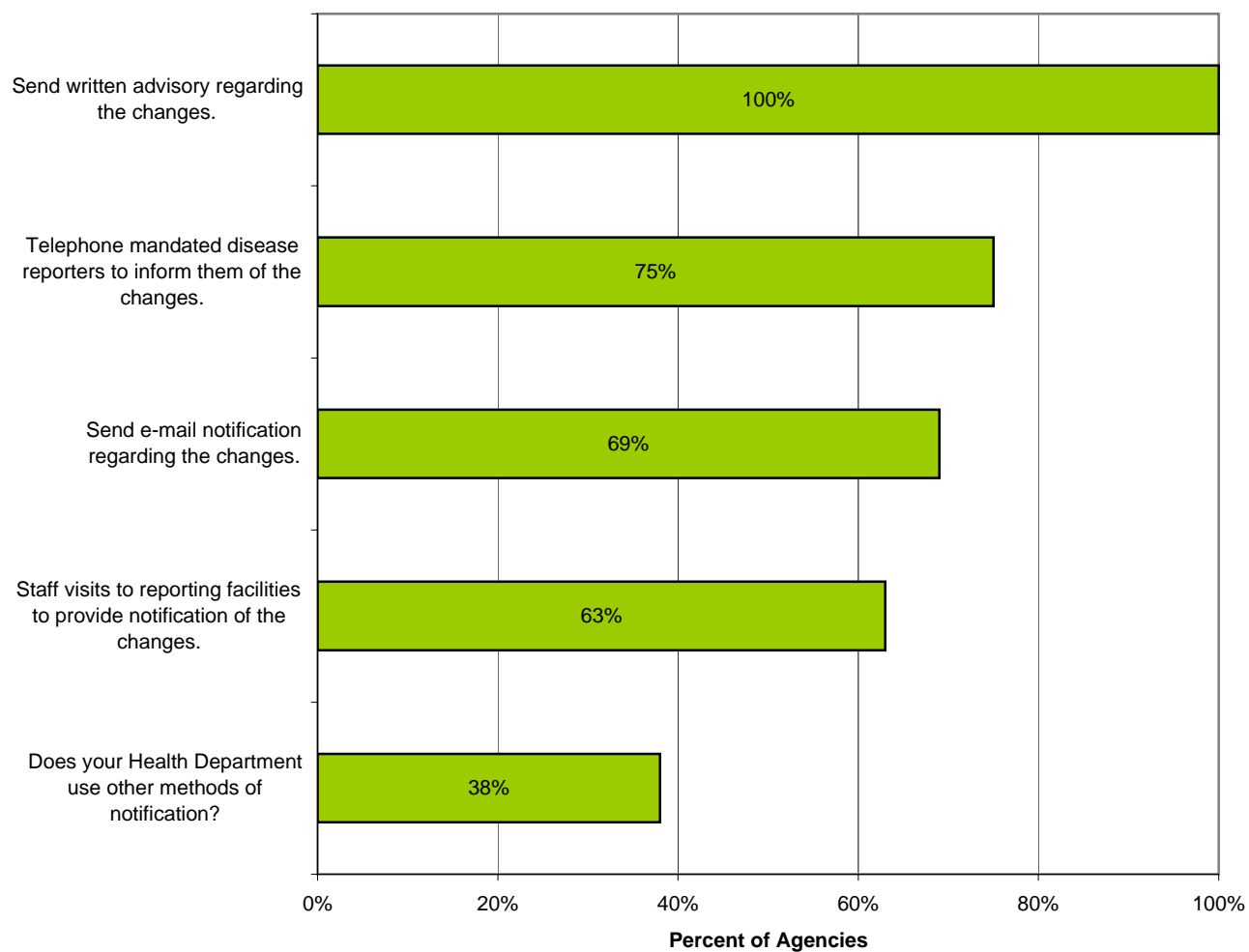
**Health Department Uses Methods to Notify Disease Reporting Facilities of
Changes to Communicable Disease Reporting Rule - 9.5
20,000 or Less Population (56 Agencies)**



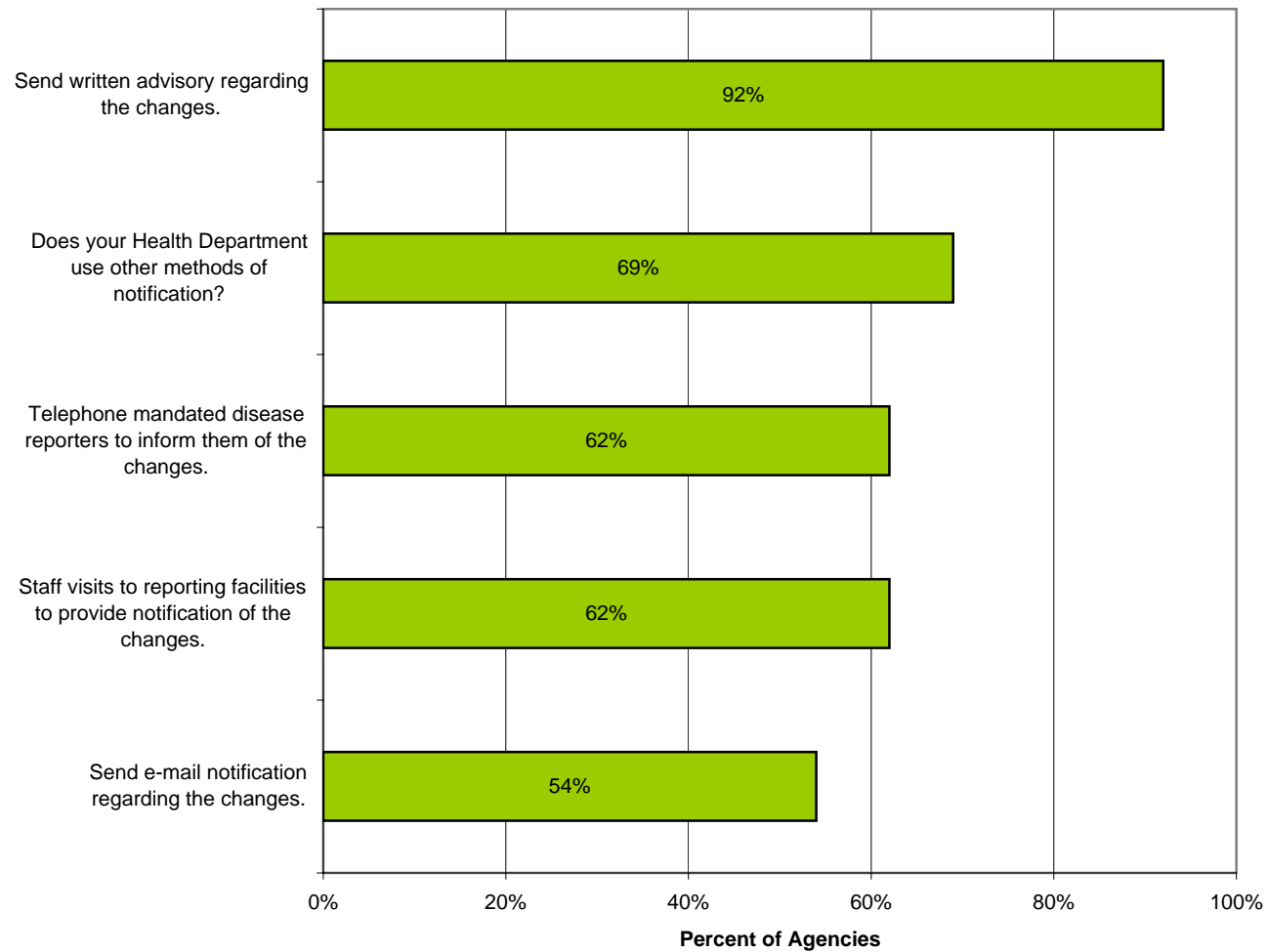
**Health Department Uses Methods to Notify Disease Reporting Facilities of
Changes to Communicable Disease Reporting Rule - 9.5
20,001-40,000 Population (29 Agencies)**



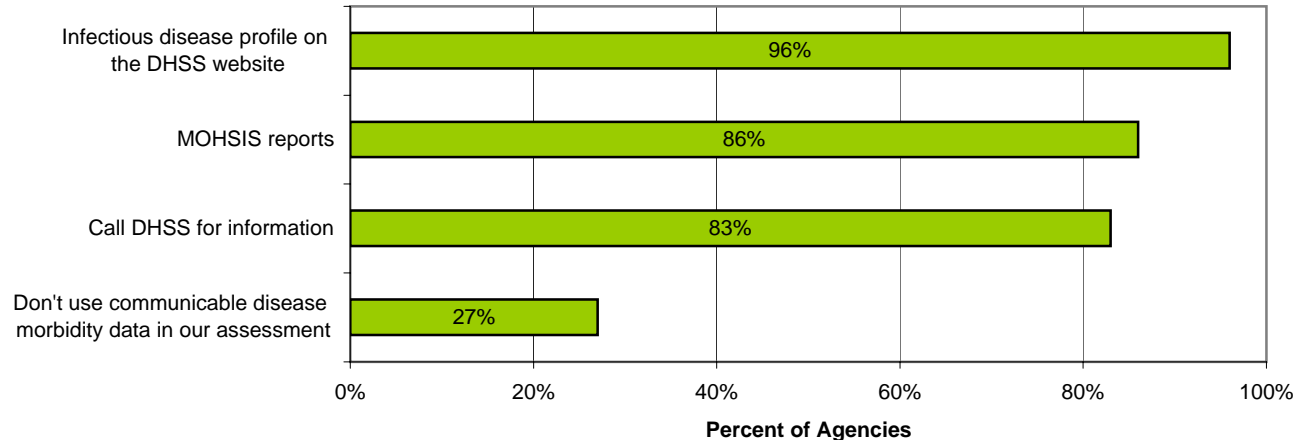
**Health Department Uses Methods to Notify Disease Reporting Facilities of
Changes to Communicable Disease Reporting Rule - 9.5
40,001-80,000 Population (16 Agencies)**



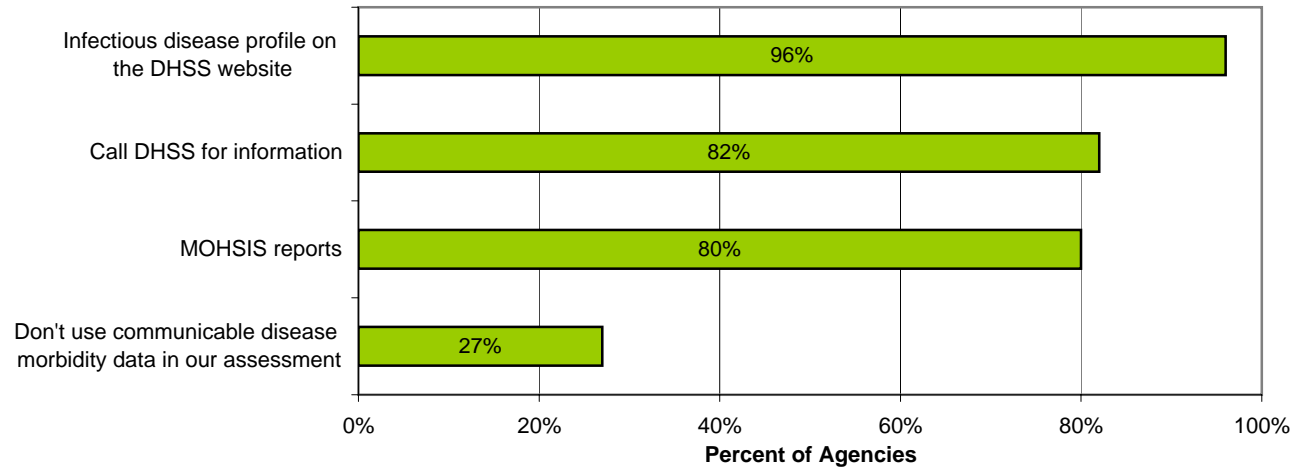
**Health Department Uses Methods to Notify Disease Reporting Facilities of
Changes to Communicable Disease Reporting Rule - 9.5
80,001 or More Population (13 Agencies)**



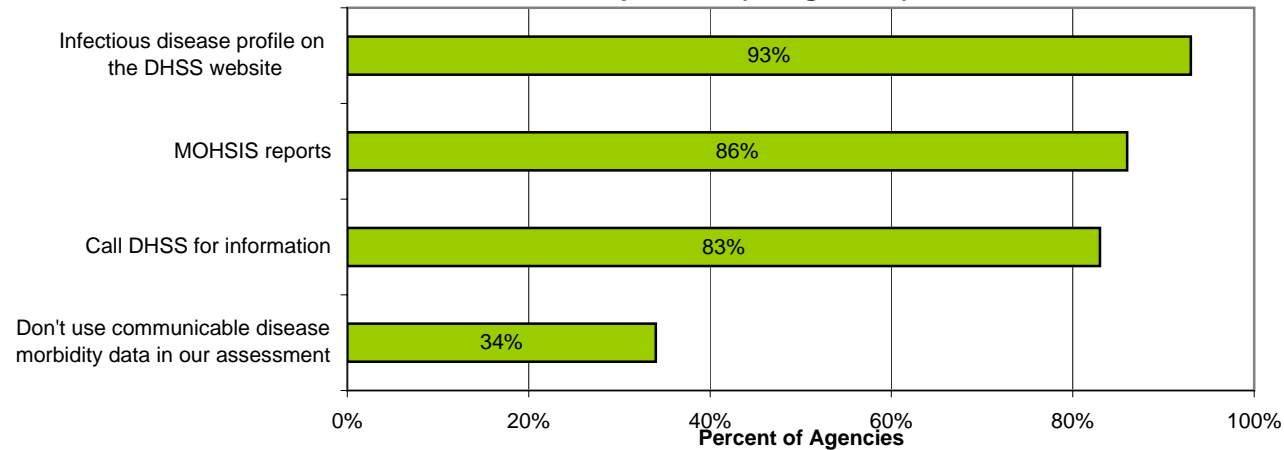
**Health Department Obtains CD Morbidity Data for Community Health Assessments
From The Following Sources - 9.6
Statewide (114 Agencies)**



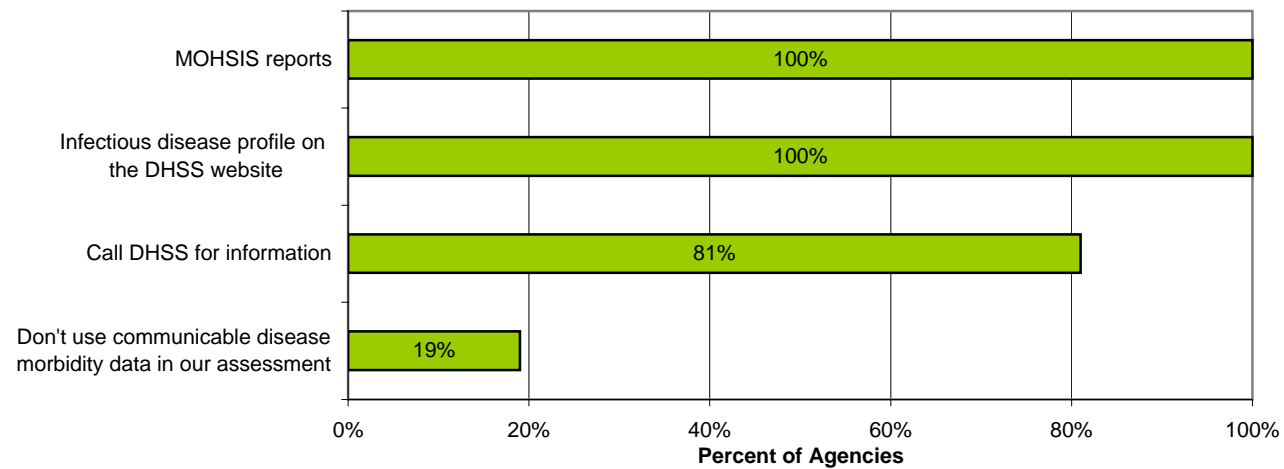
**Health Department Obtains CD Morbidity Data for Community Health Assessments
From The Following Sources - 9.6
20,000 or Less Population (56 Agencies)**



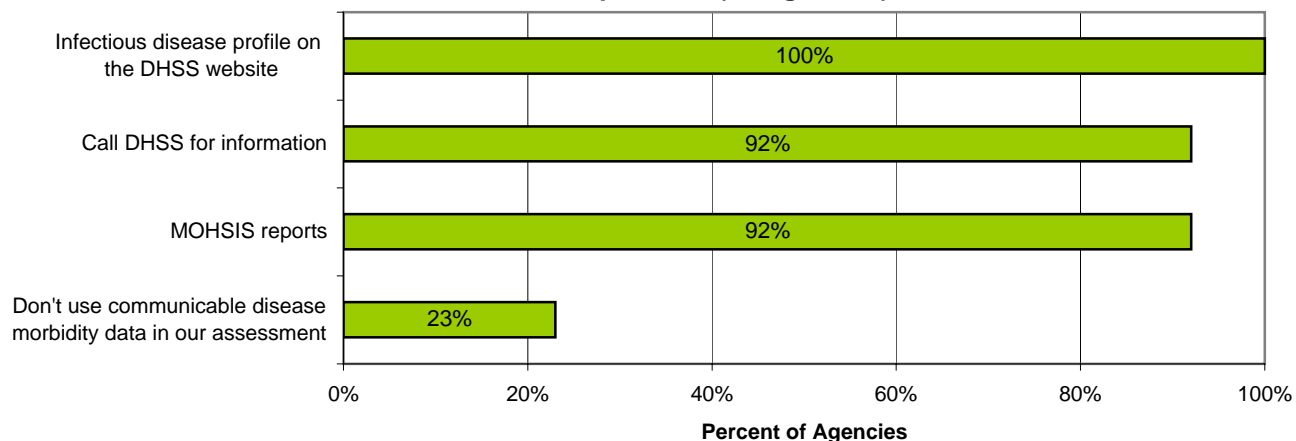
**Health Department Obtains CD Morbidity Data for Community Health Assessments
From The Following Sources - 9.6
20,001 to 40,000 Population (29 Agencies)**



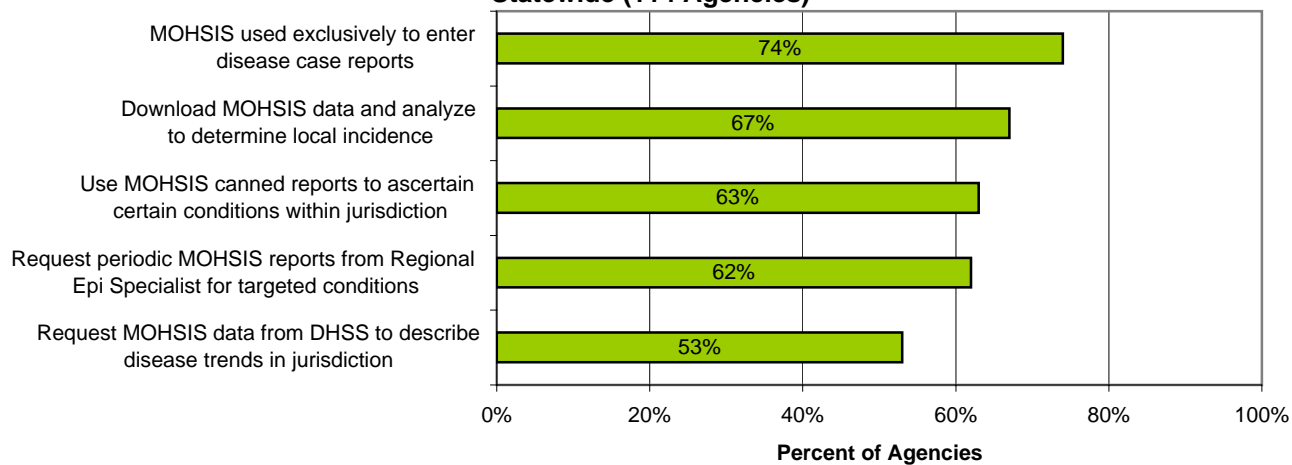
**Health Department Obtains CD Morbidity Data for Community Health Assessments
From The Following Sources - 9.6
40,001 to 80,000 Population (16 Agencies)**



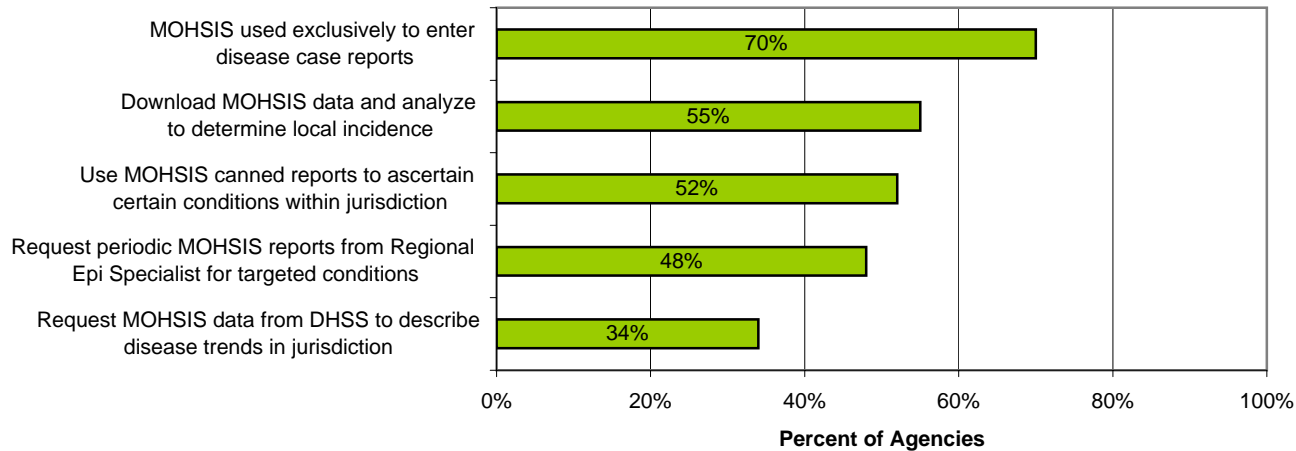
**Health Department Obtains CD Morbidity Data for Community Health Assessments
From The Following Sources - 9.6
80,001 or More Population (13 Agencies)**



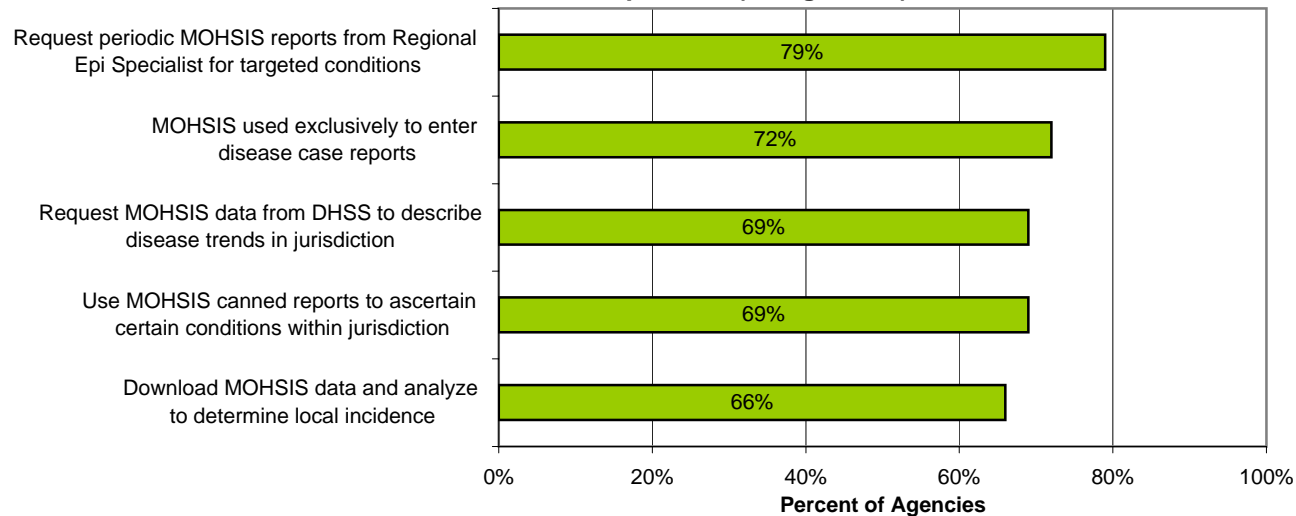
**Health Department Utilizes MOHSIS - 9.6.5
Statewide (114 Agencies)**



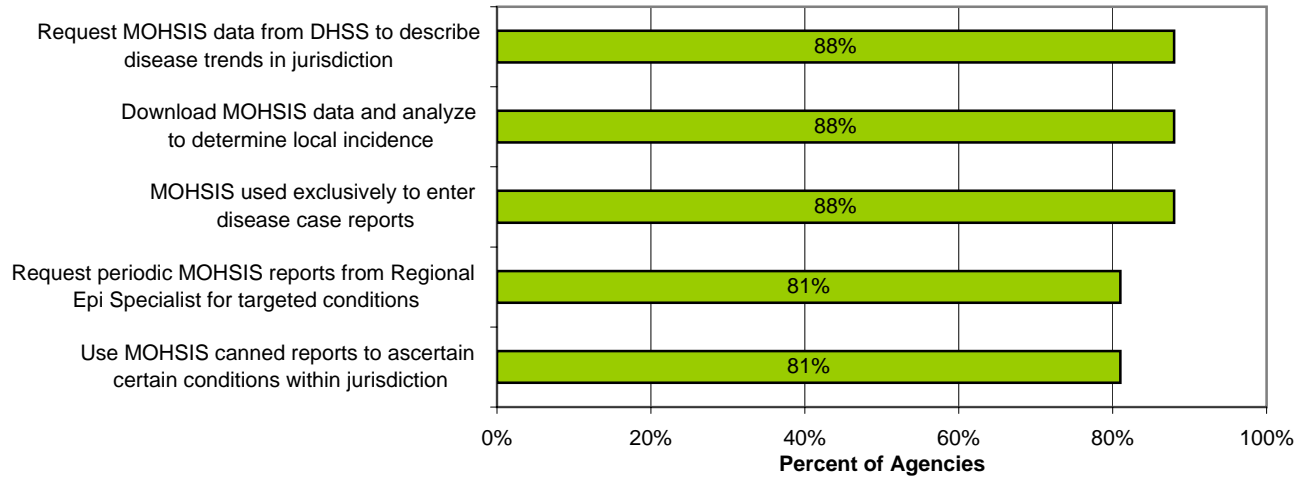
**Health Department Utilizes MOHSIS - 9.6.5
20,000 or Less Population (56 Agencies)**



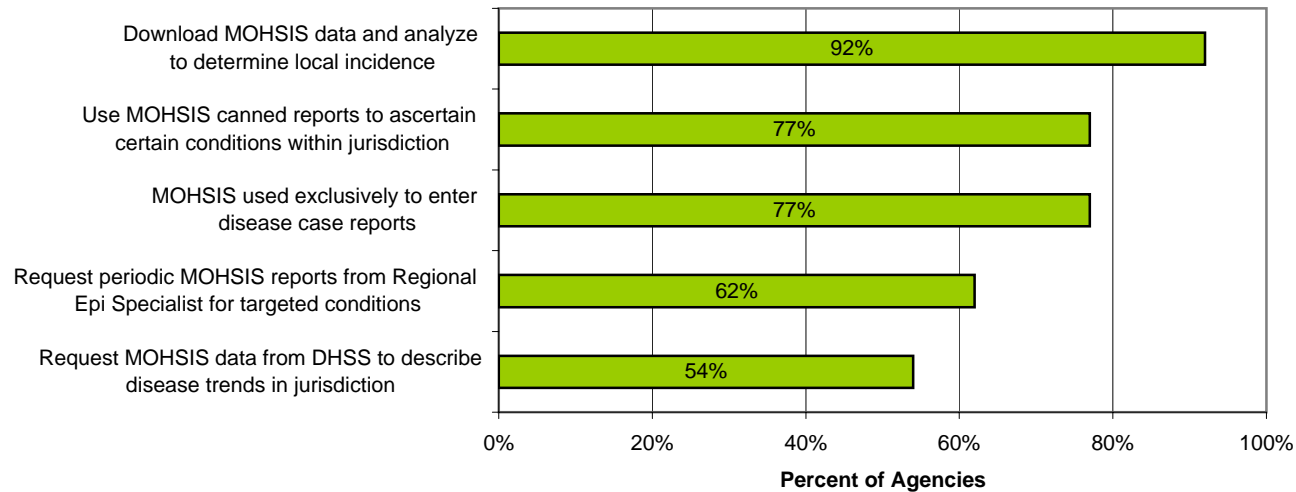
**Health Department Utilizes MOHSIS - 9.6.5
20,001 - 40,000 Population (29 Agencies)**



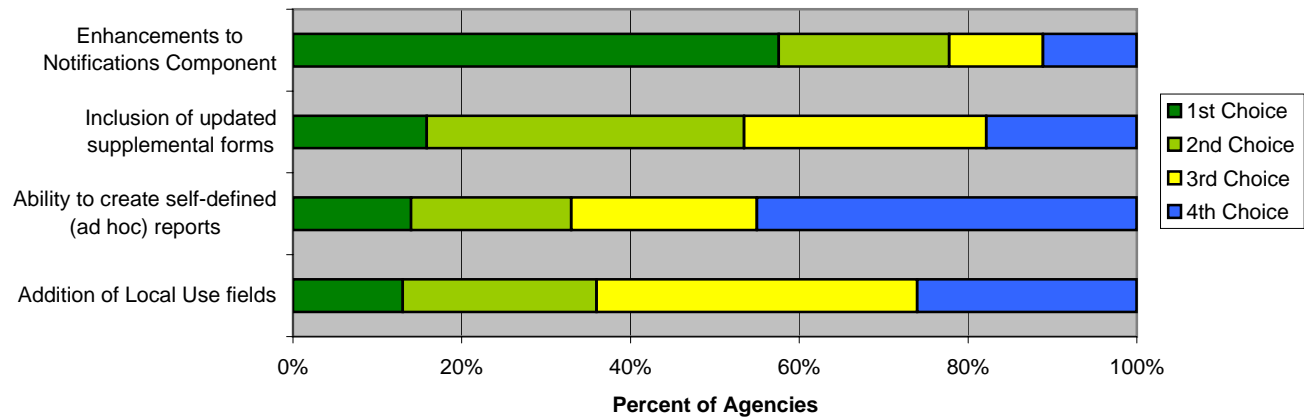
Health Department Utilizes MOHSIS - 9.6.5
40,001 - 80,000 Population (16 Agencies)



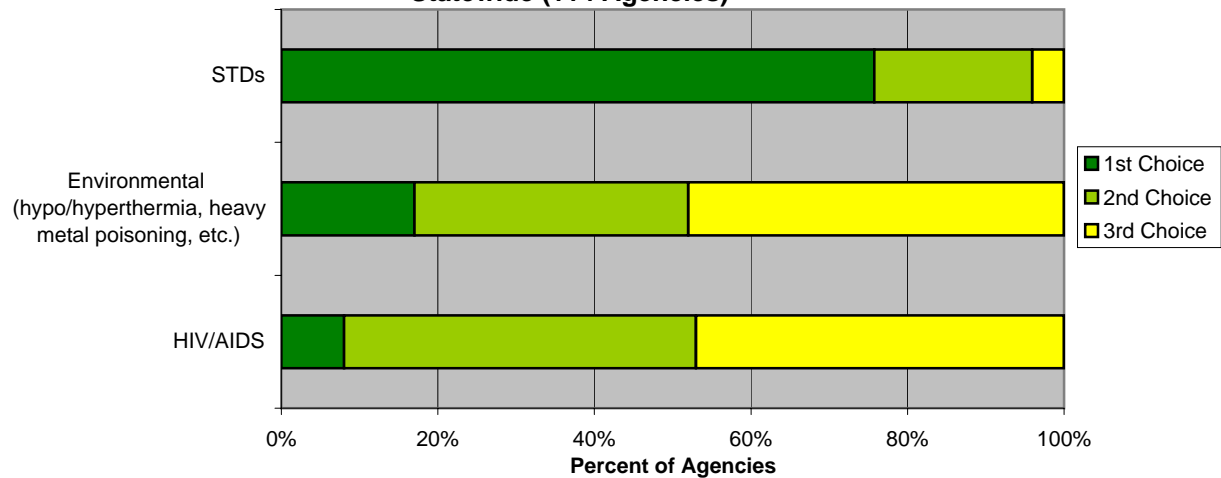
Health Department Utilizes MOHSIS - 9.6.5
80,001 or More Population (13 Agencies)



Health Department Interest in Possible MOHSIS Updates - 9.7
Statewide (114 Agencies)



Disease Categories in MOHSIS That Would Be Most Beneficial to Health Department - 9.8
Statewide (114 Agencies)



CHAPTER 5

DATA TABLES

MISCELLANEOUS ACTIVITIES RELATED TO COMMUNICABLE DISEASE REPORTING

MISCELLANEOUS ACTIVITIES

9.5. Does your Health Department use the following methods to notify disease reporting facilities in your jurisdiction when changes occur to the Communicable Disease Reporting Rule - CSR 20-20.020?

	Statewide - 114		Up to 20,000 Population - 56		20,001-40,000 Population - 29		40,001-80,000 Population - 16		Over 80,001 Population - 13	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Send written advisory regarding the changes.	108	95%	53	95%	27	93%	16	100%	12	92%
Telephone mandated disease reporters to inform them of the changes.	88	77%	46	82%	22	76%	12	75%	8	62%
Send e-mail notification regarding the changes.	59	52%	26	46%	15	52%	11	69%	7	54%
Staff visits to reporting facilities to provide notification of the changes.	82	72%	44	79%	20	69%	10	63%	8	62%
Does your Health Department use other methods of notification?	54	47%	25	45%	14	48%	6	38%	9	69%

MISCELLANEOUS ACTIVITIES

9.6. Does your Health Department obtain communicable disease morbidity data to assist you in conducting your community health assessments from the following sources?

	Statewide - 114		Up to 20,000 Population - 56		20,001-40,000 Population - 29		40,001-80,000 Population - 16		Over 80,001 Population - 13	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Infectious disease profile on the DHSS website.	110	96%	54	96%	27	93%	16	100%	13	100%
MOHSIS reports.	98	86%	45	80%	25	86%	16	100%	12	92%
Call DHSS for information.	95	83%	46	82%	24	83%	13	81%	12	92%
Don't use communicable disease morbidity data in our assessment.	31	27%	15	27%	10	34%	3	19%	3	23%

MISCELLANEOUS ACTIVITIES

9.6.5. Does your Health Department utilize MOHSIS for the following?

	Statewide - 114		Up to 20,000 Population - 56		20,001-40,000 Population - 29		40,001-80,000 Population - 16		Over 80,001 Population - 13	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
MOHSIS used exclusively to enter disease case reports.	84	74%	39	70%	21	72%	14	88%	10	77%
Use MOHSIS canned reports to ascertain certain conditions within our jurisdiction.	72	63%	29	52%	20	69%	13	81%	10	77%
Download MOHSIS data and analyze to determine local incidence.	76	67%	31	55%	19	66%	14	88%	12	92%
Request periodic MOHSIS reports from the Regional Epidemiology Specialist for targeted conditions.	71	62%	27	48%	23	79%	13	81%	8	62%
Request MOHSIS data from DHSS to describe disease trends in your jurisdiction.	60	53%	19	34%	20	69%	14	88%	7	54%

MISCELLANEOUS ACTIVITIES

9.7. Which of the below listed updates to MOHSIS would you like to see implemented first?

	1st Choice Statewide		2nd Choice Statewide		3rd Choice Statewide		4th Choice Statewide	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Enhancements to the Notifications Component (ability to export, part name, print CD1, etc.)	65	57%	23	20%	13	11%	13	11%
Inclusion of updated supplemental forms.	18	16%	43	38%	33	29%	20	18%
Addition of Local Use fields	15	13%	26	23%	43	38%	30	26%
Ability to create self-defined (ad hoc) reports.	16	14%	22	19%	25	22%	51	45%

MISCELLANEOUS ACTIVITIES

9.8. If added to MOHSIS, which of the below disease categories would most benefit your Health Department?

	1st Choice Statewide		2nd Choice Statewide		3rd Choice Statewide	
	Number	Percent	Number	Percent	Number	Percent
HIV/AIDS	9	8%	51	45%	54	47%
STDs	86	75%	23	20%	5	4%
Environmental (hypo/hyperthermia, heavy metal poisoning, etc.)	19	17%	40	35%	55	48%